



4.3.9.1 Unit Type WH.2.W Wherry 2400 Housing

This one-story, two-bedroom duplex was built in 1956. It is of standard masonry construction with a concrete slab on grade. Unit has one car garage.

This unit was occupied at time of visit. This unit type has received minor renovation improvement work.

Exterior walls are painted concrete block. The unit bears no historical designation.

	Existing	Proposed
Floor Plan Type:	WH.2.W	WH.2.W
Gross Floor Area:	1041 sf	1080 sf
Net Floor Area:	872 sf	908 sf
Number of Bedrooms:	2	2
Number of Bathrooms:	1	1
Permanent Designation:	JNCO	JNCO
CAM Rating:	3.11	
FHU Assessed:	2447 A Curry Circle North	
Number of FHUs of this Type:	12	12

ANALYSIS

Roof

- Roof Structure - Decking: plywood; good condition.
- Roof Structure - Trusses, Joist, Insulation: wood; good condition; attic insulation meets AF standards.
- Roof Covering: asphalt shingle; fair condition; existing evaporative cooler is mounted on top of roof; condensation from cooler has discolored shingles.
- Roof Pitch: sloped; good condition.
- Soffit/Fascia: aluminum; good condition.
- Flashing: aluminum; good condition.
- Gutters/Downspouts: aluminum; good condition.
- Chimneys: none; not required.
- Fire Walls: gypsum wall board; good condition; units join with concrete block wall at garage; concrete block extends to underside of older flat roof; gypsum wall board above.

Structural - Foundation/Exterior Walls

- Exterior Wall Structure: concrete masonry unit; fair condition; concrete lock walls do not provide proper insulating value for exterior walls; some noted minor cracking of block.
- Exterior Wall Covering: painted; fair condition; painted concrete block provides poor appearance; maintenance issue.
- Foundation/Basement: slab on grade; good condition; some minor slab settlement.
- Floor Structure: none; slab on grade.
- Windows - Frames: aluminum; good condition.
- Windows - Glazing: double; good condition; bedroom windows provide emergency egress.
- Windows - Screens: aluminum; good condition.
- Doors - Entry: wood; fair condition; flush door with many coats of paint.
- Doors - Sliding Glass: none; not required.
- Doors - Storm/Screen: aluminum; good condition.
- Doors - Hardware: brass; fair condition; worn finish.



Rear elevation



Rear elevation



Left side elevation



Kitchen



Kitchen

Structural - Other Building Elements

- Garage/Carport: single garage; fair condition; garage size does not meet minimum clear width by 2'-8"; current AF standard is two car garage if site allows; refer to House Plan Suitability.
- Garage Door: fiberglass; good condition.
- Porch/Stoop: stoop; good condition; concrete.
- Patio/Deck: concrete; fair condition; rear patio does not meet minimum dimension; patio area does not provide private outdoor living area.
- Balcony: none; not required.
- Storage Areas: concrete masonry unit; fair condition; exterior storage shared with Laundry; does not meet minimum area requirements.
- Trash Enclosures: none; required.
- Stairs (Exterior): none; one-story unit.
- Crawl Space: none; slab on grade unit.
- Privacy Fencing: vinyl; fair condition; fencing in good condition.
- Landscaping: grass and trees; fair condition; one tree in rear yard, no shrubs.

Mechanical

- Gas Service: steel; fair condition; corroded.
- Water Service: copper; fair condition; corroded.
- Drain/Waste/Vent: polyvinyl chloride; fair condition; restricted clean out access.
- Water Heater: gas, 40 gallon; fair condition; corroded at base.
- Heating System: gas; poor condition; some corrosion; damaged panels.
- Cooling System - Interior: none; required.
- Cooling System - Exterior: evaporative cooler; poor condition; some corrosion at base.
- Ductwork: galvanized; poor condition; contains solid particulate material.
- Register/Diffusers: metal; poor condition; painted, dented.
- Fire Protection: none; required.
- Thermostat: electric; fair condition; painted; cover cracked.

Electrical

- Electrical Panel: 100 amp; poor condition; inadequately sized; 150 amp minimum required.
- Receptacles: 15 amp; deteriorated condition; some 2-prong receptacles in used, need 8 additional.
- GFCI Receptacles/Breakers: breaker; deteriorated condition; protects bathrooms and exterior receptacles; no GFCI protection in Kitchen and Laundry GFCI breaker located in pane.
- Wiring: 2 and 3 wire; deteriorated condition; not properly grounded.
- Lighting Fixtures: incandescent and fluorescent; poor condition; dated fixtures.
- Smoke Detectors: alternating current; poor condition; alternating current with battery backup required.
- CO Detectors: alternating current; fair condition; plugged in; AF standard requires a hard-wired, battery backed-up, CO detectors at sleeping area and a minimum of one detector on each level.
- Phone Jacks: 4 wire; deteriorated condition; existing outlets need replaced and add additional outlets.
- Cable Hookups: coaxial; deteriorated condition; some exposed wiring; existing outlets need replaced and add additional outlets.
- Service Disconnect: 100 amp; poor condition; located outside, inaccessible at adjacent unit; undersized, 150 amp minimum required.
- Light Switches: single post, single throw; poor condition; near end of useful life.

General - All but Kitchen, Baths, Laundry

- Flooring - Carpet: none; not required.
- Flooring - Vinyl: vinyl composition tile; fair condition; some mismatched tiles.
- Flooring - Wood: none; not required.
- Walls: concrete masonry unit; fair condition; with gypsum wall board; concrete block has institutional appearance.
- Wall Finish: painted; fair condition; aged appearance.
- Ceilings: gypsum wall board; fair condition; some nail-pops; visible seams.
- Ceiling Finish: painted; fair condition; textured finish.



Bathroom 1

- Molding & Trim: wood; fair condition; many coats of paint; some damage and patch work.
- Stairs (Interior): none; one-story unit.
- Doors - Interior: wood; fair condition; multiple coats of paint.
- Doors - Closet: wood; fair condition; multiple coats of paint.
- Window Treatment (Blinds): mini blinds; good condition.
- Closet Shelving: wood; fair condition; multiple coats of paint.
- Interior Hardware: metal; fair condition; slightly worn finish.
- Arctic Recreation Room: none; not required at this location.

Kitchen

Kitchen is parallel wall layout.

- Cabinets: wood; fair condition; worn finishes.
- Counter Tops: laminated; fair condition; worn finish; some staining.
- Sink: stainless sink, double; fair condition; slightly worn finish.
- Sink Fixtures: metal; fair condition; worn finish.
- Refrigerator: standard; fair condition; worn interior.
- Range/Oven: gas; fair condition; older unit.
- Vent Hood: exhaust fan; fair condition; older unit.
- Dishwasher: standard; fair condition; older heating element.
- Garbage Disposal: standard; fair condition; older unit.
- Flooring: vinyl composition tile; fair condition; slightly worn.
- Walls: gypsum wall board; fair condition; uneven.
- Wall Finish: painted; fair condition; slightly worn; textured finish.
- Ceilings: gypsum wall board; fair condition; worn.
- Ceiling Finish: painted; fair condition; slightly worn.
- Interior Hardware: none; not required.

Bathroom #1

Bathroom 1 serves Bedrooms 1 and 2.

- Cabinets: wood; poor condition; worn finish; not attractive dark stain.
- Counters: cultured marble; good condition.
- Sink: cultured marble; good condition.
- Fixture Hardware: metal; fair condition; worn finish.
- Toilet: porcelain; fair condition; worn, older.
- Tub/Shower: combination; fair condition; tile enclosure; no slip resistance in tub; slight wear of ceramic tile joints.
- Flooring: vinyl composition tile; poor condition; loose tiles.
- Walls: gypsum wall board; good condition.
- Wall Finish: painted; good condition.
- Ceilings: gypsum wall board; good condition.
- Ceiling Finish: painted; good condition.
- Ventilation: window over tub/shower; no exhaust fan.
- Interior Hardware: metal; fair condition; worn finish.

Bathroom #2

None; not required for this unit type.

Bathroom #3

None; not required for this unit type.

Laundry Room

- Location: room; fair condition; adequate size; exterior access only.
- Flooring: concrete; fair condition; paint stains.
- Walls: concrete masonry unit; fair condition; poor appearance.
- Wall Finish: painted; fair condition; aged, worn.
- Ceiling: open joist; fair condition; unpainted joist.

- Ceiling Finish: none; required; exposed structure.
- Plumbing Hookup: standard; fair condition; aged, older.
- Vent Hookup: standard; fair condition; aged, older.
- Shelving: none; required to meet standard.
- Interior Hardware: metal; fair condition; worn finish.

Special Assessments

- Water Quality (Lead): this unit was constructed between 1920 and 1987; therefore the probability of lead content is moderate; tests indicate no lead in the water.
- Lead Based Paint: this unit was constructed before 1977; therefore the probability of lead based paint is high; paint samples from the units where test conducted in 1994 and 2001 show lead levels exceeding the allowable by HUD; lead has been found in the interior: wood cabinet doors, ceiling molding, doors and frames; exterior: doors and frames, concrete masonry walls, wood trim for this unit type.
- Asbestos: this unit was constructed before 1982; therefore the probability of asbestos contamination is high; an undated memo from the Asbestos Foreman indicates following to be asbestos containing material though no type or % is identified: roofing material, floor tile and mastic, cove base mastic, joint compound, caulking, window glazing, light fixture backing, HVAC flex connector and pipe insulation.
- Radon: this unit is located in Environmental Protection Agency Zone 2 designated as moderate potential for radon risk; base reports no contamination is present.
- Termites: termites are a common occurrence in this geographic location; termite infestation was not identified or reported.

House Sitework

- Walkways to House: concrete; good condition.
- Driveways to House: concrete; fair condition; drive does not provide space for two cars.

- Uncovered Parking Pads at House: none; not required.
- Electrical Service from Transformer: overhead; poor condition; reaching end of useful life; no capacity for expansion.
- Water Service Lateral from Main: polyvinyl chloride; fair condition; problems with connection at main and house.
- Sewage Service Lateral to Main: polyvinyl chloride; fair condition; problems with connection at main and house.
- Gas Service to House from Main: polyethylene; fair condition; problems with connection at main and house.
- Grading/Drainage: surface; fair condition; evidence of ponding/soil erosion by foundation; grade does not meet minimum slope requirement.

House Plan Suitability

- Bedroom 1: above standard; exceeds minimum area and dimension requirements; closet space exceeds requirements; smoke detector in hall.
- Bathroom for Bedroom 1: none; not required.
- Bedroom 2: substandard; does not meet minimum area by 6 sf and does meet dimension requirements; closet space meets minimum requirements; smoke detector in hall.
- Bedroom 3: none; not required.
- Bedroom 4: none; not required.
- Bathroom for Bedroom 2,3,4: standard; appropriate size for function.
- First Floor Bath for 2-Story House: none; not required.
- Family Room: none; not required.
- Dining Room: above standard; exceeds minimum area requirement.
- Living Room: above standard; exceeds minimum area and dimension requirements; no separation of entry from space; small closet.
- Kitchen: standard; meets minimum area and dimension requirements; good relationship to living area, outdoor space, natural light; a secondary dining area not required for this unit type.
- Occupancy: appropriate image for occupying grade.

- Covered Parking: attached single car garage only (or none); does not meet required length by 2'-6"; compatible with house architecture; AF standard is two car garage if site allows; site allows single garage.
- Overall Floor Plan: good; appropriate size for occupying grade; appropriate functional relationships; appropriate egress; inadequate entry closet space by 18" and is not adjacent to front door; does not meet minimum requirement for interior storage; base prefers exterior access to mechanical equipment; exterior access to Laundry; patio not adjacent to living/dining area.
- Architectural Aesthetics: fair; character suitable for region and location; suitable for future additions; the front elevation/entry lacks visual impact.

RECOMMENDATIONS

Roof

- Roof Covering: replace shingles located at evaporative cooler when unit is replaced/relocated.

Structural - Foundation/Exterior Walls

- Exterior Wall Structure: provide 1½" rigid insulation at interior face of exterior concrete block walls; cover with gypsum board.
- Exterior Wall Covering: apply stucco to exterior of concrete block walls.
- Doors - Entry: install new steel insulated entry doors.
- Doors - Hardware: install new hardware and dead bolt lock.

Structural - Other Building Elements

- Garage/Carport: expand garage to meet minimum dimensions.
- Patio/Deck: expand concrete patio.
- Storage Areas: provide new storage per proposed plan.

- Trash Enclosures: provide new wood trash enclosure.
- Privacy Fencing: install fence adjacent to patio.
- Landscaping: plant climate appropriate ground cover and landscaping.

Mechanical

- Gas Service: replace building gas service with steel piping.
- Water Service: replace building water service with copper piping.
- Drain/Waste/Vent: replace building drain/waste/vent system with polyvinyl chloride piping.
- Water Heater: replace water heater with 40 gallon gas unit.
- Heating System: replace heating system with forced air gas furnace.
- Cooling System - Interior: install direct exchange cooling coil.
- Cooling System - Exterior: replace exterior cooling system with electric condensing unit.
- Ductwork: replace ductwork system with galvanized/insulated ductwork.
- Register/Diffusers: replace registers and grilles.
- Thermostat: replace thermostat with digital or electronic set back type.
- Fire Protection: provide an approved disposable fire extinguisher.

Electrical

- Electrical Panel: replace electric panel with 150 minimum panel.
- Receptacles: add additional and replace all receptacles and with grounded 3 prong outlets.
- GFCI Receptacles/Breakers: add GFCI receptacles to Kitchen, Laundry, bathrooms and exterior receptacles; provide a GFCI receptacle for relocated laundry.
- Wiring: replace house wiring.
- Lighting Fixtures: replace lighting fixtures.
- Smoke Detectors: replace smoke detector with hard wired, battery backed up device.
- CO Detectors: install hard-wired, battery backed-up, CO detectors near sleeping areas.

- Phone Jacks: replace and add phone jacks.
- Cable Hookups: replace and add cable jacks, conceal wiring; recess devices.
- Service Disconnect: replace service disconnect with 150 amp, make integral to new electric panel.
- Light Switches: replace light switches.

General - All but Kitchen, Baths, Laundry

- Flooring - Vinyl: replace with ceramic tile at entry; install carpet in living areas.
- Walls: install gypsum wall board over 1½" metal furring at concrete block walls; replace gypsum wall board.
- Walls Finish: paint gypsum wall board.
- Ceiling: replace gypsum board.
- Ceiling Finish: paint gypsum board.
- Molding & Trim: replace molding and trim; apply light colored stain.
- Doors - Interior: install new doors.
- Doors - Closet: install new doors.
- Closet Shelving: replace wood shelving with vinyl covered wire shelving.
- Interior Hardware: replace hardware.

Kitchen

- Cabinets: refinish wood cabinets.
- Counter Tops: install new counter top.
- Sink: install new stainless steel sink.
- Sink Fixtures: install new sink fixtures.
- Refrigerator: install new refrigerator.
- Range/Oven: install new range/oven.
- Vent Hood: install new vent hood.
- Dishwasher: install new dishwasher.
- Garbage Disposal: install new garbage disposal.
- Flooring: install new ceramic tile floor.
- Walls: replace gypsum wall board.
- Wall Finish: paint gypsum wall board.
- Ceiling: replace gypsum board ceilings.
- Ceiling Finish: paint gypsum board.

Bathroom #1

- Cabinets: install new wood vanity cabinet with cultured marble top.
- Fixture Hardware: install new hardware.
- Toilet: replace toilet.
- Tub/Shower: install new tub with ceramic tile enclosure; fill in existing window in tub/shower.
- Flooring: install new ceramic tile floor.
- Ventilation: install new exhaust fan.
- Interior Hardware: install new hardware.

Bathroom #2

No recommendation.

Bathroom #3

No recommendation.

Laundry Room

See House Plan Suitability.

- Location: locate door from Laundry into the interior of the unit per proposed plan.
- Flooring: install new vinyl composition tile.
- Walls: install gypsum wall board over existing concrete masonry unit.
- Wall Finish: paint gypsum wall board.
- Ceiling: install new gypsum wall board ceiling.
- Ceiling Finish: paint.
- Plumbing Hookup: install new plumbing hookup.
- Vent Hookup: install new vent hookup.
- Shelving: install new wall cabinet.
- Interior Hardware: install new interior hardware.

Special Assessments

- Lead Based Paint: test for lead based paint and if present remove and replace all suspect material; remove interior: wood cabinets, ceiling molding,

doors and frames; remove exterior: doors, frames and wood trim, lead paint on concrete masonry unit walls will be encapsulated with stucco.

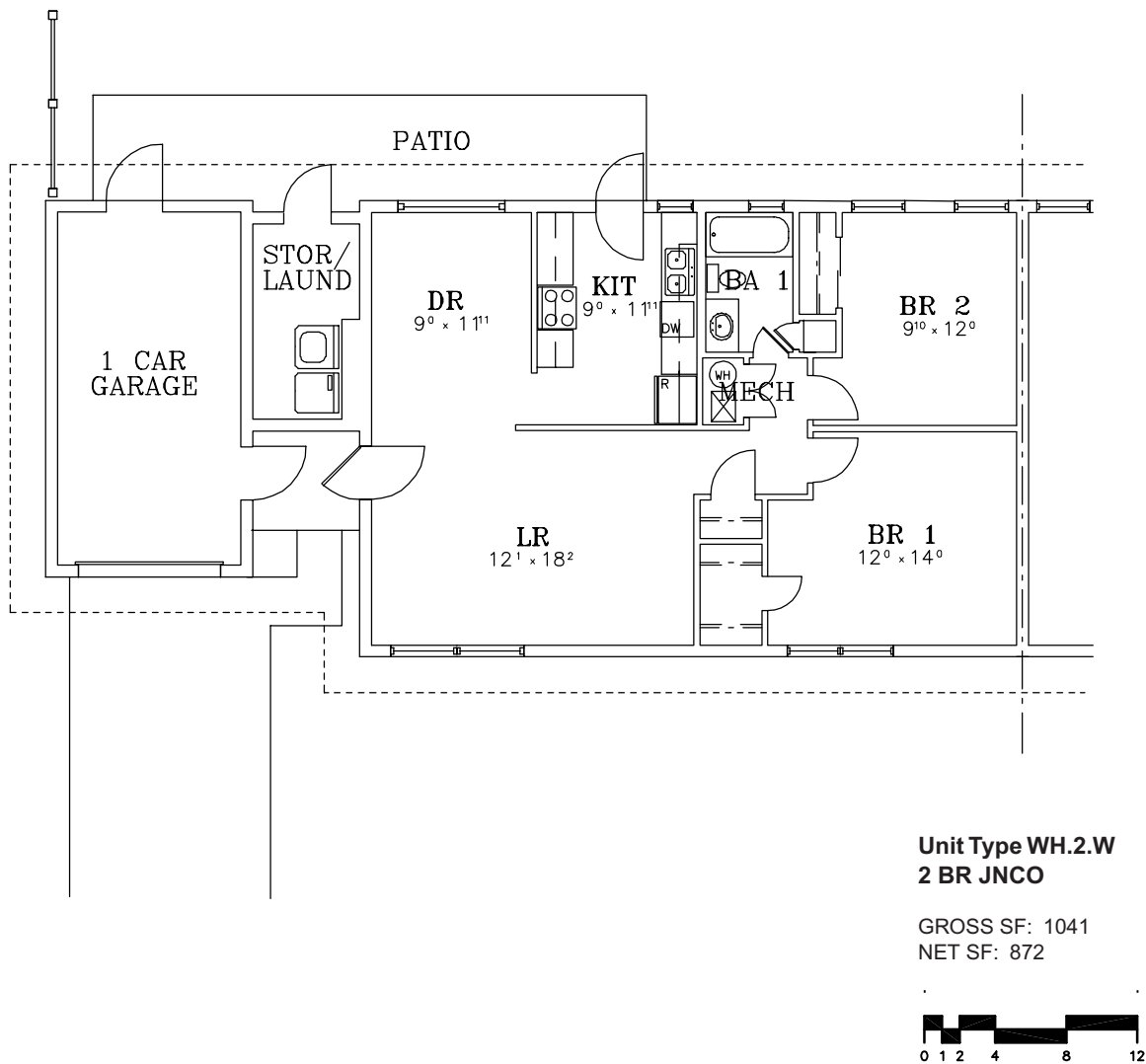
- Asbestos: properly abate and dispose of all material identified for removal and properly encapsulate all friable material scheduled to be retained; roofing material and window glazing to remain; vinyl composition tile and mastic, gypsum wall board and joint compound, light fixture backing, HVAC flex connectors and pipe insulation.
- Radon: continue to monitor.
- Termites: treat regularly for termite prevention.

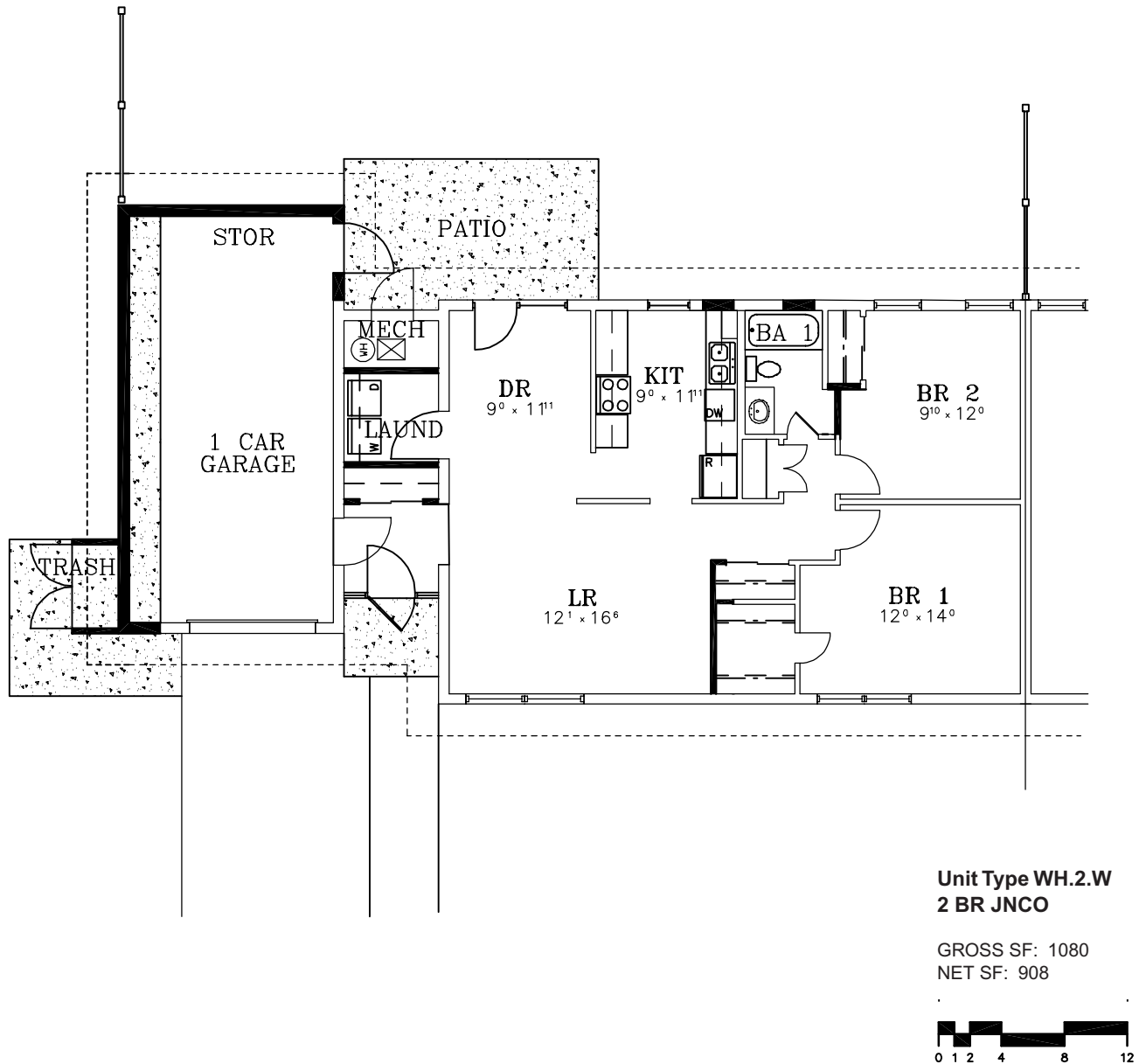
House Sitework

- Driveways to House: widen parking pad.
- Electrical Service from Transformer: replace overhead service with underground service.
- Water Service Lateral from Main: replace water service from main with copper tubing.
- Sewage Service Lateral to Main: replace sewage service to main with polyvinyl chloride piping.
- Gas Service to House from Main: replace gas service from main with polyethylene tubing.
- Grading/Drainage: regrade to provide proper drainage away from foundation.

House Plan Suitability

- Bedroom 2: expand bedroom per proposed plan.
- Living Room: expand closet per proposed plan; add wall to create entry.
- Covered Parking: expand per proposed plan to meet required length.
- Overall Floor Plan: modify to provide storage/closet, and interior access to Laundry; locate door from Laundry into the interior of the unit per proposed plan, install new vinyl composition tile, install gypsum wall board over existing concrete masonry units, install new gypsum board ceiling, paint new gypsum wall board walls and ceiling, install new plumbing and vent hookups, install new wall cabinet and new interior hardware for Laundry room; provide new access from Dining Room to patio.
- Architectural Aesthetics: use new stucco to create more interest on exterior.

**EXISTING**



4.3.9.1.1 Unit Type WH.2.W

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$183
Structural/Foundation/Exterior Walls	\$11,046
Structural/Other Building Elements	\$6,039
Mechanical	\$12,382
Electrical	\$7,791
General/All but Kitchen, Baths, Laundry	\$14,596
Kitchen	\$6,677
Bathroom #1	\$3,746
Bathroom #2	\$0
Bathroom #3	\$0
Laundry Room	\$2,279
Special Assessments	\$7,393
House Sitework	\$7,386
House Plan Suitability	\$26,499
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$106,017
ACF (0.98) Adjusted Subtotal	\$103,897
SIOH @3.00%	\$3,117
Contingency @5.00%	\$5,351
Adjusted Subtotal (FY2001\$)	\$112,365
Escalation @3.33%	\$3,742
Total Unit Improvement Cost (FY2003\$)	\$116,106



4.3.9.2 Unit Type WH.2.X Wherry 2400 Housing

This one-story, two-bedroom multi-family four-plex was built in 1956. It is of standard masonry construction with a concrete slab on grade. No carport or garage is provided. Exterior walls are painted concrete block. The unit bears no formal historical designation. Existing garage was converted into a Dining Room and a Laundry/Storage room.

This unit was unoccupied at time of visit. This unit type has not received renovation improvement work. 74 units are in Wherry 2200-2300 Area. 84 units are in Wherry 2400 Area. 4 units are recommended for demolition. This unit type is assessed in Section 4.3.8.2.

	Existing	Proposed
Floor Plan Type:	WH.2.X	WH.2.X
Gross Floor Area:	1138 sf	1191 sf
Net Floor Area:	898 sf	978 sf
Number of Bedrooms:	2	2
Number of Bathrooms:	1	1
Permanent Designation:	JNCO	JNCO
CAM Rating:	2.95	
FHU Assessed:	2430B Eddy Loop	
Number of FHUs of this Type:	84	80

4.3.9.2.1 Unit Type WH.2.X

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$520
Structural/Foundation/Exterior Walls	\$11,771
Structural/Other Building Elements	\$6,984
Mechanical	\$12,915
Electrical	\$8,468
General/All but Kitchen, Baths, Laundry	\$17,133
Kitchen	\$0
Bathroom #1	\$3,969
Bathroom #2	\$0
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$9,363
House Sitework	\$6,182
House Plan Suitability	\$31,937
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$109,242
ACF (0.98) Adjusted Subtotal	\$107,057
SIOH @3.00%	\$3,212
Contingency @5.00%	\$5,513
Adjusted Subtotal (FY2001\$)	\$115,783
Escalation @3.33%	\$3,856
Total Unit Improvement Cost (FY2003\$)	\$119,638



4.3.9.3 Unit Type WH.2.Y Wherry 2400 Housing

This one-story, two-bedroom quad-plex was built in 1956. It is of standard masonry construction with a concrete slab on grade. A one car garage is provided.

Exterior walls are painted concrete masonry units. The unit bears no historical designation.

This unit was occupied at time of visit. This unit type has received minor renovation improvement work.

130 units in Wherry 2200-2300 Area. 32 units are in Wherry 2400 area. This unit type is assessed in Section 4.3.8.3.

	Existing	Proposed
Floor Plan Type:	WH.2.Y	WH.2.Y
Gross Floor Area:	1305 sf	1348 sf
Net Floor Area:	1068 sf	1049 sf
Number of Bedrooms:	2	2
Number of Bathrooms:	2	2
Permanent Designation:	JNCO	JNCO
CAM Rating:	3.18	
FHU Assessed:	2417B Mora Loop	
Number of FHUs of this Type:	32	32

4.3.9.3.1 Unit Type WH.2.Y

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,209
Structural/Foundation/Exterior Walls	\$15,770
Structural/Other Building Elements	\$10,645
Mechanical	\$13,672
Electrical	\$8,747
General/All but Kitchen, Baths, Laundry	\$20,248
Kitchen	\$0
Bathroom #1	\$4,467
Bathroom #2	\$3,808
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,568
House Sitework	\$6,722
House Plan Suitability	\$16,493
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$110,348
ACF (0.98) Adjusted Subtotal	\$108,141
SIOH @3.00%	\$3,244
Contingency @5.00%	\$5,569
Adjusted Subtotal (FY2001\$)	\$116,955
Escalation @3.33%	\$3,895
Total Unit Improvement Cost (FY2003\$)	\$120,850



4.3.9.4 Unit Type WH.2.Z Wherry 2400 Housing

This one-story two-bedroom duplex was built in 1956. It is of standard masonry construction with a concrete slab on grade. A one car garage is provided.

Exterior walls are concrete block. The concrete block units were originally constructed with flat roof. Wood trusses with asphalt shingle roof have been added.

This unit was occupied at time of visit. This unit type has received minor renovation improvement.

68 units are in Wherry 2200-2300 Area. 16 units are in Wherry 2400 Area. This unit type is assessed in Section 4.3.8.4.

	Existing	Proposed
Floor Plan Type:	WH.2.Z	WH.2.Z
Gross Floor Area:	1373 sf	1373 sf
Net Floor Area:	1080 sf	1152 sf
Number of Bedrooms:	2	2
Number of Bathrooms:	2	2
Permanent Designation:	JNCO	JNCO
CAM Rating:	3.11	
FHU Assessed:	2368A Travis Loop	
Number of FHUs of this Type:	16	16

4.3.9.4.1 Unit Type WH.2.Z

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,970
Structural/Foundation/Exterior Walls	\$12,526
Structural/Other Building Elements	\$5,426
Mechanical	\$14,016
Electrical	\$8,849
General/All but Kitchen, Baths, Laundry	\$14,102
Kitchen	\$0
Bathroom #1	\$5,301
Bathroom #2	\$3,642
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,583
House Sitework	\$6,102
House Plan Suitability	\$24,327
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$104,843
ACF (0.98) Adjusted Subtotal	\$102,746
SIOH @3.00%	\$3,082
Contingency @5.00%	\$5,291
Adjusted Subtotal (FY2001\$)	\$111,120
Escalation @3.33%	\$3,700
Total Unit Improvement Cost (FY2003\$)	\$114,820



4.3.9.5 Unit Type WH.3.W Wherry 2400 Housing

This one-story, three-bedroom duplex was built in 1956. It is of standard masonry construction with a concrete slab on grade. A one car garage is provided.

This unit was unoccupied at time of visit. This unit type has received minor renovation improvement work. 32 units are in 2200-2300 Area. 32 units are in 2400 Area. This unit type is assessed in Section 4.3.8.5.

Exterior walls are painted concrete masonry units.

	Existing	Proposed
Floor Plan Type:	WH.3.W	WH.2.W.2
Gross Floor Area:	1106 sf	1106 sf
Net Floor Area:	955 sf	877 sf
Number of Bedrooms:	3	2
Number of Bathrooms:	1	1
Permanent Designation:	JNCO	JNCO
CAM Rating:	2.97	
FHU Assessed:	2436A Eddy Place	
Number of FHUs of this Type:	32	32

4.3.9.5.1 Unit Type WH.2.W.2

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$1,750
Structural/Foundation/Exterior Walls	\$12,242
Structural/Other Building Elements	\$5,852
Mechanical	\$12,196
Electrical	\$7,866
General/All but Kitchen, Baths, Laundry	\$10,382
Kitchen	\$0
Bathroom #1	\$0
Bathroom #2	\$0
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,430
House Sitework	\$6,102
House Plan Suitability	\$30,546
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$94,366
ACF (0.98) Adjusted Subtotal	\$92,479
SIOH @3.00%	\$2,774
Contingency @5.00%	\$4,763
Adjusted Subtotal (FY2001\$)	\$100,016
Escalation @3.33%	\$3,331
Total Unit Improvement Cost (FY2003\$)	\$103,346



4.3.9.6 Unit Type WH.3.X Wherry 2400 Housing

This one-story, three-bedroom single-family unit was built in 1956. It is of standard masonry construction with a concrete slab on grade. No garage or carport is provided.

Exterior walls are concrete block. The neighborhood units are one-story with ranch styling. The unit bears no

formal historical designation. The existing garage was converted into a Dining Room and Kitchen.

This unit was occupied at time of visit. This unit type has received minor renovation improvement work. 10 units are in Wherry 2200-2300 Area. 3 units are in Wherry 2400 Area. This unit type is assessed in Section 4.3.8.6.

	Existing	Proposed
Floor Plan Type:	WH.3.X	WH.2.X.2
Gross Floor Area:	1426 sf	1426 sf
Net Floor Area:	1240 sf	1143 sf
Number of Bedrooms:	3	2
Number of Bathrooms:	1	1
Permanent Designation:	JNCO	JNCO
CAM Rating:	3.05	
FHU Assessed:	2293 Mesquite Road	
Number of FHUs of this Type:	3	3

4.3.9.6.1 Unit Type WH.2.X.2

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,739
Structural/Foundation/Exterior Walls	\$17,012
Structural/Other Building Elements	\$12,238
Mechanical	\$12,597
Electrical	\$7,811
General/All but Kitchen, Baths, Laundry	\$21,344
Kitchen	\$6,314
Bathroom #1	\$0
Bathroom #2	\$0
Bathroom #3	\$0
Laundry Room	\$1,891
Special Assessments	\$7,613
House Sitework	\$6,214
House Plan Suitability	\$6,584
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$102,358
ACF (0.98) Adjusted Subtotal	\$100,311
SIOH @3.00%	\$3,009
Contingency @5.00%	\$5,166
Adjusted Subtotal (FY2001\$)	\$108,486
Escalation @3.33%	\$3,613
Total Unit Improvement Cost (FY2003\$)	\$112,099



4.3.9.7 Unit Type WH.4.W Wherry 2400 Housing

This one-story, single-family unit was built in 1956. It is of standard masonry construction with a concrete slab on grade. No garage or carport is provided.

Exterior walls are painted concrete block which give the unit little aesthetic appeal.

This unit was unoccupied at time of visit. This unit type has received minor renovation improvement work. 37 units are in wherry 2200-2300 Area. 12 units are in Wherry 2400 Area. This unit type is assessed in Section 4.3.8.7.

	Existing	Proposed
Floor Plan Type:	WH.4.W	WH.4.W
Gross Floor Area:	1531 sf	1694 sf
Net Floor Area:	1294 sf	1396 sf
Number of Bedrooms:	4	4
Number of Bathrooms:	2	2
Permanent Designation:	JNCO/SNCO	JNCO
CAM Rating:	2.96	
FHU Assessed:	2442 Curry Circle South	
Number of FHUs of this Type:	12	12

4.3.9.7.1 Unit Type WH.4.W

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,219
Structural/Foundation/Exterior Walls	\$17,438
Structural/Other Building Elements	\$5,054
Mechanical	\$14,096
Electrical	\$9,658
General/All but Kitchen, Baths, Laundry	\$21,893
Kitchen	\$8,513
Bathroom #1	\$0
Bathroom #2	\$0
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,766
House Sitework	\$6,957
House Plan Suitability	\$35,206
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$128,800
ACF (0.98) Adjusted Subtotal	\$126,224
SIOH @3.00%	\$3,787
Contingency @5.00%	\$6,501
Adjusted Subtotal (FY2001\$)	\$136,511
Escalation @3.33%	\$4,546
Total Unit Improvement Cost (FY2003\$)	\$141,057



4.3.9.8 Unit Type WH.4.X Wherry 2400 Housing

This one-story, four-bedroom single-family unit was built in 1956. It is of standard masonry construction with a concrete slab on grade. No garage or carport is provided.

This unit was occupied at time of visit. This unit type has received minor renovation improvement work.

Exterior walls are painted concrete block. Existing garage was converted into a Family Room and interior storage.

	Existing	Proposed
Floor Plan Type:	WH.4.X	WH.4.X
Gross Floor Area:	1710 sf	1732 sf
Net Floor Area:	1461 sf	1488 sf
Number of Bedrooms:	4	4
Number of Bathrooms:	2	2
Permanent Designation:	SNCO	SNCO
CAM Rating:	2.99	
FHU Assessed:	2488 Curry Circle South	
Number of FHUs of this Type:	1	1

ANALYSIS

Roof

- Roof Structure - Decking: plywood; good condition.
- Roof Structure - Trusses, Joist, Insulation: wood; good condition; approximately 7-inches of attic insulation; does not meet AF standard.
- Roof Covering: asphalt shingle; fair condition; existing evaporative cooler is mounted on top of roof; condensation from cooler has discolored shingles.
- Roof Pitch: sloped; good condition; meet required 3 in 12 slope.
- Soffit/Fascia: aluminum; fair condition; roof attic space is inadequately vented; ventilation only at soffit.
- Flashing: aluminum; good condition.
- Gutters/Downspouts: aluminum; good condition.
- Chimneys: none; not required.
- Fire Walls: none; not required for single-family unit.

Structural - Foundation/Exterior Walls

- Exterior Wall Structure: concrete masonry unit; fair condition; concrete block walls do not provide proper insulating value for exterior walls.
- Exterior Wall Covering: painted; fair condition; painted concrete block provides poor appearance; maintenance issues.
- Foundation/Basement: slab on grade; good condition.
- Floor Structure: none; slab on grade.
- Windows - Frames: aluminum; good condition.
- Windows - Glazing: double; good condition; bedroom windows provide emergency egress.
- Windows - Screens: aluminum; deteriorated condition; screens are missing, torn, and/or bent.
- Doors - Entry: wood; fair condition; flush door with many coats of paint.
- Doors - Sliding Glass: aluminum; fair condition; no secondary locking device.
- Doors - Storm/Screen: aluminum; fair condition.



Right side elevation



Rear elevation



Left side elevation



Kitchen



Bathroom 1

- Doors - Hardware: brass; fair condition; entry door does not have dead bolt.

Structural - Other Building Elements

- Garage/Carport: none; current AF standard is two car garage if site allows; refer to House Plan Suitability.
- Garage Door: none; current AF standard is two car garage if site allows; refer to House Plan Suitability.
- Porch/Stoop: none; not required; concrete sidewalk from driveway to front entry.
- Patio/Deck: concrete; good condition; adequately sized.
- Balcony: none; not required.
- Storage Areas: concrete masonry unit; fair condition; located within Laundry.
- Trash Enclosures: none; required.
- Stairs (Exterior): none; one-story unit.
- Crawl Space: none; slab on grade unit.
- Privacy Fencing: concrete masonry unit; good condition; provide screening for rear patio and yard.
- Landscaping: grass and trees; fair condition; mature trees provide shade; no shrubs.

Mechanical

- Gas Service: steel; fair condition; corroded.
- Water Service: copper; fair condition; corroded.
- Drain/Waste/Vent: steel; fair condition; restricted clean out access.
- Water Heater: gas, 40 gallon; fair condition; corroded at base; insufficient capacity for four bedroom unit.
- Heating System: gas; poor condition; insufficient combustion air; evidence of poor combustion.
- Cooling System - Interior: none; required.
- Cooling System - Exterior: evaporative cooler; poor condition; some corrosion at base.
- Ductwork: galvanized; deteriorated condition; contains solid particulate material; damaged.
- Register/Diffusers: metal; fair condition; painted; dented.
- Fire Protection: none; required.

- Thermostat: electric; fair condition; painted; cover cracked.

Electrical

- Electrical Panel: 100 amp; deteriorated condition; actual 125 amp; inadequately sized, 150 amp minimum required.
- Receptacles: 15 amp; deteriorated condition; some 2-prong receptacles in used, need 10 additional.
- GFCI Receptacles/Breakers: breaker; deteriorated condition; protects bathrooms and exterior receptacles; no GFCI protection in Kitchen; located in panel.
- Wiring: 2 and 3 wire; deteriorated condition; not properly grounded.
- Lighting Fixtures: incandescent and fluorescent; poor condition; dated fixtures.
- Smoke Detectors: alternating current; fair condition; alternating current/battery backup required.
- CO Detectors: alternating current; fair condition; plugged in; AF standard requires a hard-wired, battery backed-up, CO detectors at sleeping area and a minimum of one detector on each level.
- Phone Jacks: 4 wire; deteriorated condition; some exposed wiring; existing outlets need replaced and add additional outlets.
- Cable Hookups: coaxial; deteriorated condition; some exposed wiring; existing outlets need replaced and add additional outlets.
- Service Disconnect: 100 amp; deteriorated condition; located outside; inaccessible at adjacent unit; undersized, 150 amp minimum required.
- Light Switches: single post, single throw; deteriorated condition; at end of useful life.

General - All but Kitchen, Baths, Laundry

- Flooring - Carpet: none; not required.
- Flooring - Vinyl: vinyl composition tile; fair condition; mismatched tiles and minor damage in places.
- Flooring - Wood: none; not required.
- Walls: concrete masonry unit; fair condition; exterior walls concrete masonry, interior walls gypsum



Bathroom 2

wall board; possible damage from water; visible patch work.

- Wall Finish: painted; fair condition; multiple layers of paint; paint is peeling.
- Ceilings: gypsum wall board; fair condition; ceiling board has cracks, patchwork, and board seams are visible.
- Ceiling Finish: painted; fair condition; peeling paint.
- Molding & Trim: wood; fair condition; many coats of paint.
- Stairs (Interior): none; one-story unit.
- Doors - Interior: wood; fair condition; multiple coats of paint.
- Doors - Closet: wood; fair condition; multiple coats of paint.
- Window Treatment (Blinds): mini blinds; good condition.
- Closet Shelving: wood; fair condition; multiple coats of paint.
- Interior Hardware: metal; fair condition; slightly worn finish.
- Arctic Recreation Room: none; not required at this location.

Kitchen

Kitchen is L-shaped with adjacent dining nook.

- Cabinets: wood; fair condition; cabinet finish and interiors are worn.
- Counter Tops: laminated; fair condition; dated butcher block pattern.
- Sink: stainless sink, double; fair condition; finish has dulled.
- Sink Fixtures: metal; fair condition; slightly corroded.
- Refrigerator: two-door; good condition.
- Range/Oven: gas; fair condition; slightly worn.
- Vent Hood: exhaust fan; fair condition.
- Dishwasher: standard; fair condition.
- Garbage Disposal: standard; fair condition.
- Flooring: vinyl composition tile; fair condition; few broken and uneven tile.
- Walls: gypsum wall board; fair condition; wall board seams are visible.

- Wall Finish: painted; fair condition; textured paint.
- Ceilings: gypsum wall board; fair condition.
- Ceiling Finish: painted; fair condition.
- Interior Hardware: none; not required.

Bathroom #1

Bathroom 1 serves Bedrooms 1, 2 and 3.

- Cabinets: wood; fair condition; worn finish and interior of cabinet.
- Counters: cultured marble; good condition.
- Sink: cultured marble; good condition.
- Fixture Hardware: metal; fair condition.
- Toilet: porcelain; fair condition.
- Tub/Shower: combination; fair condition; ceramic tile surround.
- Flooring: vinyl composition tile; fair condition; loose tile at tub due to water damage.
- Walls: gypsum wall board; fair condition; uneven.
- Wall Finish: painted; poor condition; paint is peeling.
- Ceilings: gypsum wall board; fair condition; uneven.
- Ceiling Finish: painted; poor condition; large patches of peeling paint hanging from ceiling.
- Ventilation: window; exhaust fan required.
- Interior Hardware: metal; fair condition; worn finish.

Bathroom #2

Bathroom 2 serves Bedroom 4.

- Cabinets: none; wall mounted sink; does not meet AF standards.
- Counters: none; wall mounted sink; does not meet AF standards.
- Sink: wall mounted porcelain; fair condition; stained.
- Fixture Hardware: metal; fair condition; corroded.
- Toilet: porcelain; fair condition; stained.
- Tub/Shower: shower; fair condition; dated ceramic tile walls and flooring.

- Flooring: vinyl composition tile; poor condition; tile has been damaged at shower area.
- Walls: concrete masonry unit; fair condition; visible seam.
- Wall Finish: painted; fair condition; aged appearance.
- Ceilings: gypsum wall board; fair condition; visible seam.
- Ceiling Finish: painted; fair condition; aged appearance.
- Ventilation: exhaust fan; fair condition; dated fan.
- Interior Hardware: metal; fair condition; worn finish.

Bathroom #3

None; not required for this unit type.

Laundry Room

- Location: room; fair condition; adequate size; located at rear of house with exterior access only.
- Flooring: concrete; fair condition; paint stains.
- Walls: concrete masonry unit; fair condition; uneven appearance.
- Wall Finish: painted; fair condition; room requires painting, walls dirty.
- Ceiling: gypsum wall board; fair condition; signs of patch work.
- Ceiling Finish: painted; fair condition; aged appearance.
- Plumbing Hookup: standard; fair condition; aged, worn.
- Vent Hookup: standard; fair condition; aged, loose.
- Shelving: metal; fair condition; aged, worn.
- Interior Hardware: metal; fair condition; finish worn.

Special Assessments

- Water Quality (Lead): unit was constructed between 1920 and 1987; therefore the probability of lead content is moderate; tests indicate no lead in the water.

- Lead Based Paint: unit was constructed before 1977; therefore the probability of lead based paint is high; paint samples from the units where test conducted in 1994 and 2001 show lead levels exceeding the allowable by HUD; lead has been found in the interior: wood cabinets doors, ceiling molding, doors and frames; exterior: doors and frames, concrete masonry walls, wood trim for this unit type.
- Asbestos: unit was constructed before 1982; therefore the probability of asbestos contamination is high; an undated memo from the Asbestos Foreman indicates the following to be asbestos containing material though no type or percent is identified: roofing material, floor tile and mastic, cove base mastic, joint compound, caulking, window glazing, light fixture backing, HVAC flex connector and pipe insulation.
- Radon: unit is located in Environmental Protection Agency Zone 2 designated as moderate potential for radon risk; base reports no contamination is present.
- Termites: termites are a common occurrence in this geographic location; termite infestation was not identified or reported.

House Sitework

- Walkways to House: concrete; good condition; no parallel sidewalk to street.
- Driveways to House: concrete; good condition; only one car can parking drive.
- Uncovered Parking Pads at House: none; not required.
- Electrical Service from Transformer: overhead; deteriorated condition; reaching end of useful life; no capacity for expansion.
- Water Service Lateral from Main: polyvinyl chloride; poor condition; problems with connection at main and house.
- Sewage Service Lateral to Main: polyvinyl chloride; fair condition; problems with connection at main and house.
- Gas Service to House from Main: polyethylene; fair condition; problems with connection at main and house.

- Grading/Drainage: surface; fair condition; grade does not meet minimum slope requirements; floor slab is not 8-inches above grade.

House Plan Suitability

- Bedroom 1: above standard; exceeds minimum area and dimension requirements; closet space exceeds minimum; smoke detector in hall.
- Bathroom for Bedroom 1: none; required for four bedroom unit; is provided for Bedroom 4.
- Bedroom 2: substandard; does not meet minimum area by 10 sf and does dimension requirements; closet space meets minimum; smoke detector in hall.
- Bedroom 3: standard; meets minimum area and dimension requirements; closet space exceeds minimum; smoke detector in hall.
- Bedroom 4: substandard; exceeds minimum area by 6 sf and does dimension requirements; no closet provided; smoke detector in hall.
- Bathroom for Bedroom 2,3,4: substandard; not appropriate size for function; minimum dimension under by 12"; wall mounted sink; no counter space.
- First Floor Bath for 2-Story House: none; not required for one-story.
- Family Room: above standard; meets minimum area and dimension requirements.
- Dining Room: substandard; does not meet minimum area by 29 sf or does dimension requirements; standard; meets minimum area and dimension requirements; not separated from Kitchen.
- Living Room: above standard; exceeds minimum area and dimension requirements.
- Kitchen: standard; meets minimum area and dimension requirements; good relationship to living areas; outside space, natural light; not adjacent to Family Room.
- Occupancy: appropriate image for occupying grade.
- Covered Parking: none; garage has been converted to living space; AF standard is two car garage if site allows; site does not allow garage or carport.
- Overall Floor Plan: fair; appropriate size for occupying grade; appropriate functional relationships; appropriate egress; entry is not

separated from Living Room; exterior access to Laundry; base prefers exterior access to mechanical equipment.

- Architectural Aesthetics: fair; character suitable for region, location; setback from street is minimal leaving a small front yard and no additional parking in driveway; these units along street are repetitive.

RECOMMENDATIONS

Roof

- Roof Structure: provide R-30 batt insulation in attic.
- Roof Covering: clean/replace shingles located at "swamp" coolers when units are replaced/relocated.
- Soffit/Fascia: install additional roof vents.

Structural - Foundation/Exterior Walls

- Exterior Wall Structure: provide 1½" rigid insulation at interior face of exterior concrete block walls; cover with gypsum board.
- Exterior Wall Covering: apply stucco to exterior of concrete block walls.
- Windows Screen: install new window screens.
- Doors - Entry: install new steel insulated entry doors.
- Doors - Sliding Glass: replace with new steel insulated patio doors.
- Doors - Storm/Screen: replace aluminum storm/screen door.
- Doors - Hardware: install new hardware and dead bolt lock.

Structural - Other Building Elements

- Garage/Carport: currently space does not exist for the addition of the carport; secondary parking is at the street.
- Storage Areas: see proposed plan.
- Trash Enclosure: provide trash enclosure.

- Landscaping: plant climate appropriate ground cover and landscaping.

Mechanical

- Gas Service: replace building gas service with steel piping.
- Water Service: replace building water service with copper piping.
- Drain/Waste/Vent: replace building drain/waste/vent system with polyvinyl chloride piping.
- Water Heater: replace water heater with 40 gallon gas unit.
- Heating System: replace heating system with forced air gas furnace.
- Cooling System - Interior: install direct exchange cooling coil.
- Cooling System - Exterior: replace exterior cooling system with electric condensing unit.
- Ductwork: replace ductwork system with galvanized/insulated ductwork.
- Register/Diffusers: replace registers and grilles.
- Thermostat: replace thermostat with digital or electronic set back type.
- Fire Protection: provide an approved disposable fire extinguisher.

Electrical

- Electrical Panel: replace electric panel with 150 minimum panel.
- Receptacles: add additional and replace all receptacles and with grounded 3 prong outlets.
- GFCI Receptacles/Breakers: add GFCI receptacles to Kitchen, Laundry, bathrooms and exterior receptacles; provide GFCI receptacle in relocated Laundry.
- Wiring: replace house wiring.
- Lighting Fixtures: replace lighting fixtures.
- Smoke Detectors: replace smoke detector with hard wired, battery backed up device.
- CO Detectors: install hard-wired, battery backed-up, CO detectors near sleeping areas.
- Phone Jacks: replace and add phone jacks, conceal wiring, recess devices.

- Cable Hookups: replace and add cable jacks, conceal wiring recess devices.
- Service Disconnect: replace service disconnect with 150 amp, make integral to new electric panel.
- Light Switches: replace light switches.

General - All but Kitchen, Baths, Laundry

- Flooring - Vinyl: replace with ceramic tile at entry; install carpet in living areas.
- Walls: install gypsum wall board over 1½" metal furring at concrete block walls; replace gypsum wall board walls.
- Walls Finish: paint gypsum wall board.
- Ceiling: replace gypsum wall board.
- Ceiling Finish: paint gypsum wall board.
- Molding & Trim: replace molding and trim; apply light colored stain.
- Doors - Interior: install new wood doors.
- Doors - Closet: install new wood doors.
- Closet Shelving: replace wood shelving with vinyl coated wire shelving.
- Interior Hardware: replace hardware.

Kitchen

See House Plan Suitability.

Bathroom #1

See House Plan Suitability.

Bathroom #2

See House Plan Suitability.

- Cabinets: install new wood vanity cabinet.
- Counters: install new cultured marble counter top/sink.
- Sink: install new cultured marble counter top/sink.
- Fixture Hardware: install new hardware.

- Toilet: replace toilet.
- Tub/Shower: install shower with ceramic tile enclosure; fill in existing window in tub/shower.
- Flooring: install new ceramic tile floor.
- Walls: install gypsum wall board over 1 1/2 metal furring.
- Wall Finish: paint gypsum wall board.
- Ceiling: sand/refinish gypsum wall board ceilings.
- Ceiling Finish: paint gypsum wall board.
- Ventilation: install new exhaust fan.
- Interior Hardware: install new hardware.

Bathroom #3

No recommendation.

Laundry Room

See House Plan Suitability.

Special Assessments

- Lead Based Paint: test for lead based paint and if present remove and replace all suspect material; remove interior: wood cabinets, ceiling molding, doors and frames; exterior: doors, frames and wood trim, lead paint on concrete masonry unit walls will be encapsulated with stucco.
- Asbestos: properly abate and dispose of all material identified for removal and properly encapsulate all friable material scheduled to be retained; roofing material and window glazing to remain; remove vinyl composition tile and mastic, cove base and mastic, gypsum wall board and joint compound, light fixture backing, HVAC flex connectors and pipe insulation.
- Radon: continue to monitor.
- Termites: treat regularly for termite prevention.

House Sitework

- Electrical Service from Transformer: replace overhead service with underground service.
- Water Service Lateral from Main: replace water service from main with copper tubing.
- Sewage Service Lateral to Main: replace sewage service to main with polyvinyl chloride piping.
- Gas Service to House from Main: replace gas service from main with polyethylene tubing.
- Grading/Drainage: regrade to provide proper drainage away from foundation.

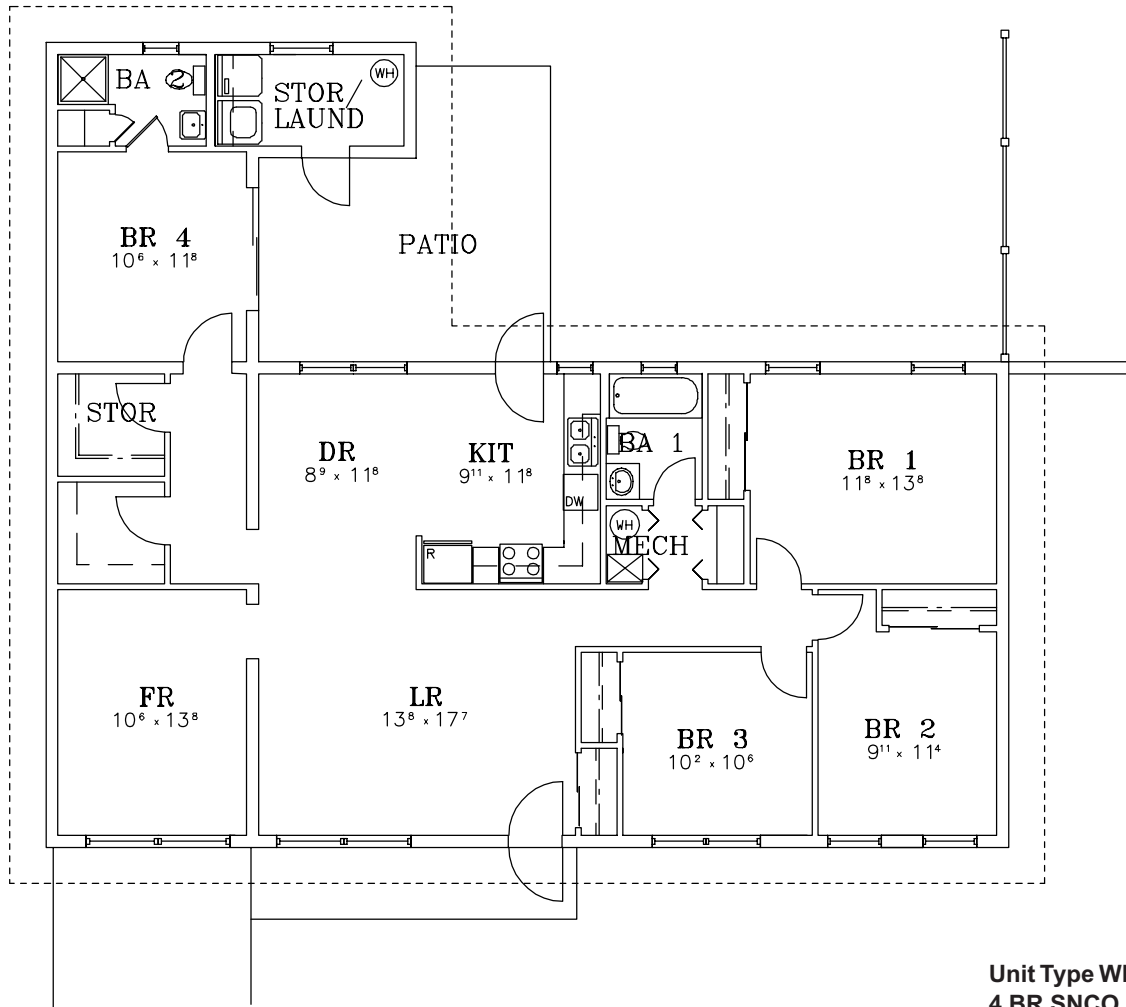
House Plan Suitability

- Bathroom for Bedroom 1: redesignate the bedrooms, Bedroom 4 to Bedroom 1, to meet the requirements; expand bedroom and adjacent bathroom per proposed plan to create Master Bedroom and bath; install new wood vanity cabinet; install new cultured marble counter top/sink; install new hardware; replace toilet; install shower with ceramic tile enclosure; fill in existing window in tub/shower; install new ceramic tile floor; install gypsum wall board over 1 1/2 metal furring; replace gypsum wall board ceilings; paint gypsum wall board walls and ceiling; install new exhaust fan; install new hardware.
- Bedroom 2: redesignate Bedroom 1 to Bedroom 2.
- Bedroom 3: redesignate Bedroom 2 to Bedroom 3.
- Bedroom 4: redesignate Bedroom 3 to Bedroom 4.
- Bathroom for Bedroom 2,3,4: install new cultured marble top; install new fixture hardware; replace toilet; install new tub with ceramic tile enclosure, fill in existing window in tub/shower; replace gypsum wall board walls and ceilings; paint gypsum wall board walls and ceiling; install new exhaust fan; install new hardware; expand counter and room per proposed plan.
- Dining Room: redesignate Family Room and Dining Room; areas will meet the requirements.
- Kitchen: replace wood cabinets; install new counter top; install new stainless steel sink; install new sink fixtures; install new range/oven, exhaust fan, dishwasher and disposal; install new ceramic tile floor; replace gypsum wall board walls and ceiling; paint new gypsum wall board walls and ceiling;

install secondary eating space in Kitchen at new island to use space more efficiently; see proposed plan.

- Covered Parking: space is not available for garage/carport.
- Overall Floor Plan: per proposed plan, add addition for relocate mechanical space, and Laundry; use existing Laundry for exterior storage area; relocate Laundry into the interior of the unit per proposed plan, install vinyl composition tile, replace gypsum wall board walls and ceilings, paint gypsum wall board walls and ceilings, install new plumbing and vent hookups, install new wall cabinet and new interior hardware; Bedroom 1 modified.
- Architectural Aesthetics: add detail with new stucco finish to improve character of unit; add trellis to front to improve image.

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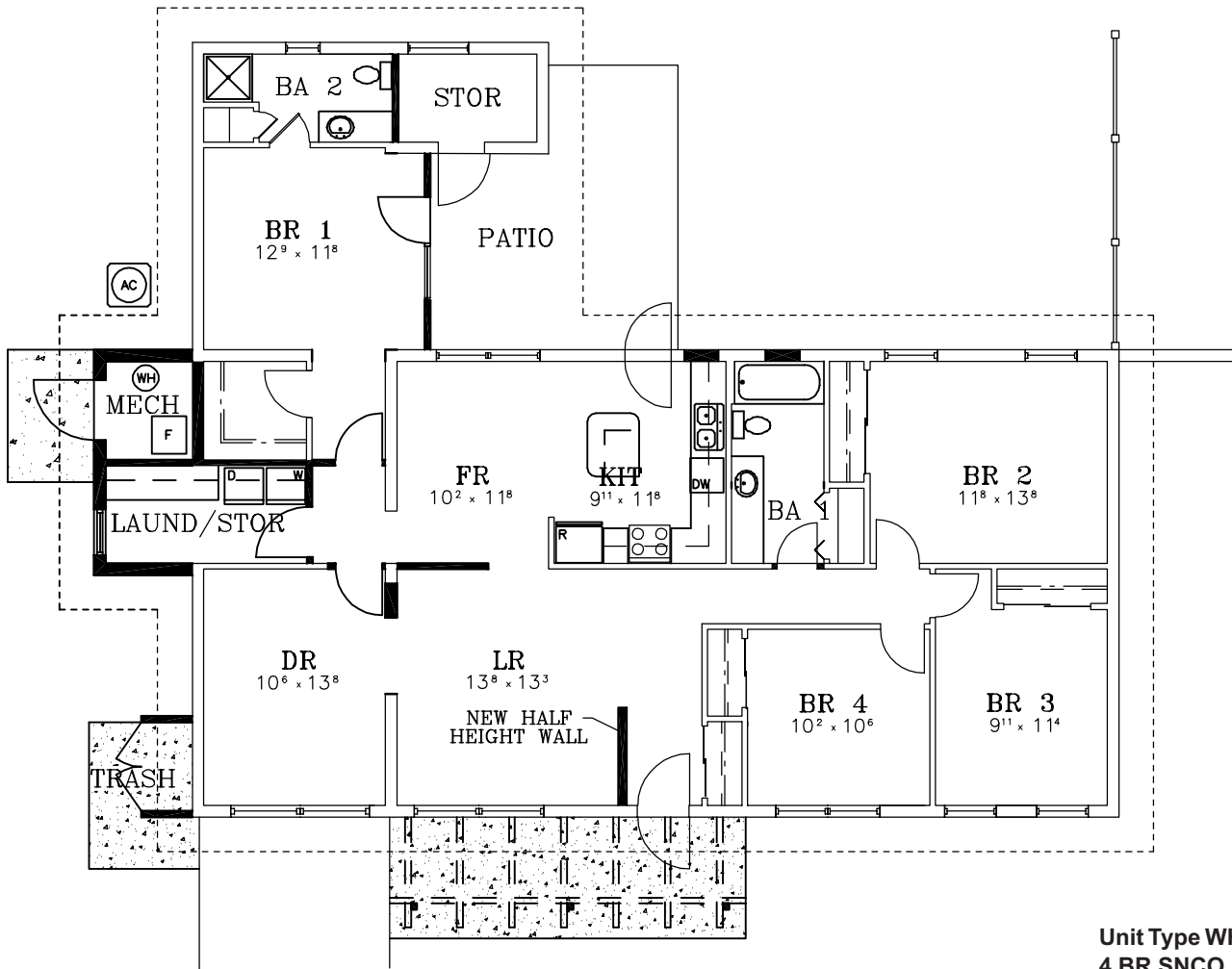


Unit Type WH.4.X
4 BR SNCO

GROSS SF: 1732
NET SF: 1488



EXISTING



Unit Type WH.4.X
4 BR SNCO

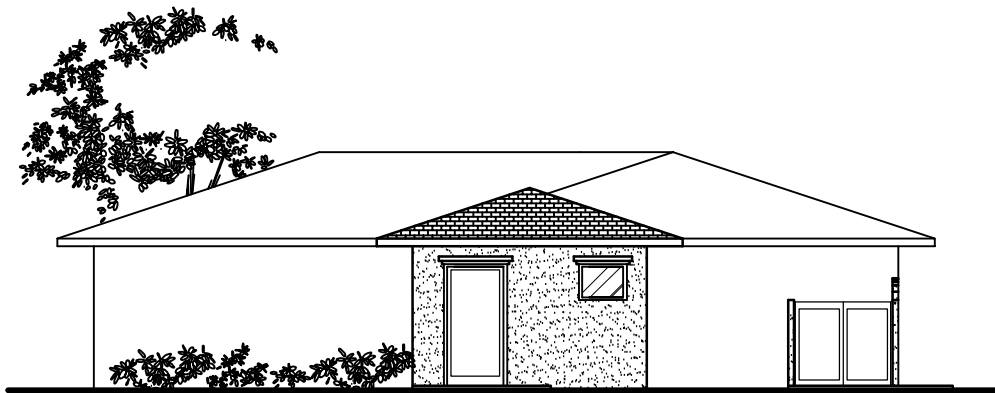
GROSS SF: 1710
NET SF: 1461



PROPOSED



FRONT ELEVATION



SIDE ELEVATION

Unit Type WH.4.X
4 BR SNCO

GROSS SF: 1710
NET SF: 1461



PROPOSED

4.3.9.8.1 Unit Type WH.4.X

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,932
Structural/Foundation/Exterior Walls	\$21,274
Structural/Other Building Elements	\$4,948
Mechanical	\$15,524
Electrical	\$10,118
General/All but Kitchen, Baths, Laundry	\$19,057
Kitchen	\$0
Bathroom #1	\$0
Bathroom #2	\$4,920
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,787
House Sitework	\$6,164
House Plan Suitability	\$44,285
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$137,010
ACF (0.98) Adjusted Subtotal	\$134,270
SIOH @3.00%	\$4,028
Contingency @5.00%	\$6,915
Adjusted Subtotal (FY2001\$)	\$145,213
Escalation @3.33%	\$4,836
Total Unit Improvement Cost (FY2003\$)	\$150,048

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4.3.9.9 Unit Type WH.4.Y Wherry 2400 Housing

This one-story, four-bedroom duplex was built in 1956. It is of standard masonry construction with a concrete slab on grade. Unit does not have a garage or carport.

Exterior walls are painted concrete block. Existing garage was converted into a Dining Room and a master bedroom closet.

This unit was unoccupied at time of visit. This unit type has received minor renovation improvement work.

12 units are in Wherry 2200-2300 Area.

8 units are in Wherry 2400 Area.

	Existing	Proposed
Floor Plan Type:	WH.4.Y	WH.4.Y
Gross Floor Area:	1655 sf	1760 sf
Net Floor Area:	1450 sf	1503 sf
Number of Bedrooms:	4	4
Number of Bathrooms:	2	2
Permanent Designation:	SNCO/JNCO	JNCO
CAM Rating:	2.96	
FHU Assessed:	2426 A Eddy Loop	
Number of FHUs of this Type:	8	8

4.3.9.9.1 Unit Type WH.4.Y

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$2,480
Structural/Foundation/Exterior Walls	\$17,132
Structural/Other Building Elements	\$14,517
Mechanical	\$15,405
Electrical	\$7,733
General/All but Kitchen, Baths, Laundry	\$20,001
Kitchen	\$0
Bathroom #1	\$0
Bathroom #2	\$3,371
Bathroom #3	\$0
Laundry Room	\$0
Special Assessments	\$7,743
House Sitework	\$7,365
House Plan Suitability	\$48,713
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$144,460
ACF (0.98) Adjusted Subtotal	\$141,571
SIOH @3.00%	\$4,247
Contingency @5.00%	\$7,291
Adjusted Subtotal (FY2001\$)	\$153,109
Escalation @3.33%	\$5,099
Total Unit Improvement Cost (FY2003\$)	\$158,207

4.4 GOQ Unit Improvements

4.4.1 Introduction

This section includes information from the GOQ Master Plan completed in December of 2000 for all Buildings at Holloman AFB designated as General Officer Quarters (GOQs). These GOQ units were further assessed in this HCP using the updated unit size standards. The whole house cost estimate has been revised to reflect the program year (FY03), the current area cost factor, the SIOH associated with the most probable construction agent, and the new housing standards. The revised whole house cost estimate for each unit type is used to develop the summary reports in this HCP.

4.4.2 GOQ Units

There is one unit at Holloman AFB designated as GOQ. It is located in the 2700-2800 Area. This unit exceeds both the Improvement Minimum Acceptable Area for Improvement (1830 NSF/2270 GSF) and the Replacement and New Construction Minimum (2100 NSF/2600 GSF). Therefore, no building additions are necessary to meet these new guidelines.

4.4.2.1 Updated Assessment for Unit Type CP.4.G 2710 San Juan Loop

	Existing	Proposed
Floor Plan Type:	CP.4.G	CP.4.G
Gross Floor Area:	3033	3012
Net Floor Area:	2675	2675
Number of Bedrooms:	4	4
Number of Bathrooms:	2.5	2.5
Permanent Designation:	GOQ	GOQ
CAM Rating:	3.75	
Unit Assessed:	2710 San Juan Loop	
Number of FHUs of this Type:	1	



4.3.2.1 Unit Type CP.4.G 2710 San Juan Loop Holloman AFB, New Mexico

This one-story, four-bedroom, two-full and one-half bathroom GOQ has 2,675 net square feet and 3,033 gross square feet. The rambler style GOQ was constructed in 1959. The structure is load bearing wood frame walls with asphalt shingled roofing on wood trusses. The foundation is a conventional slab-on-grade construction. This GOQ has insulated bronze anodized aluminum, double-glazed windows. There are two, gas-fired furnaces that provide heating and cooling for the GOQ. Covered parking is provided by a two-car garage located at the side of the GOQ. Three systems are provided to heat and cool this residence. Two of the systems are gas-fired furnaces with split system DX air conditioning system. The third system is a through-the-wall electric heater with DX coil. This GOQ is occupied by the Installation Commander and is not eligible to be listed on the National Register of Historic Places. This GOQ was assessed in May 2000.

Projects undertaken at this GOQ include the enclosure of the patio to extend the exterior living space. Bathroom 1 has been reconfigured with a new shower with a ledge and the conversion of part of the area to a linen closet facing the hallway. The Kitchen has been reconfigured with the addition of an eat-in bar. The addition of the bookshelves between the family room and the Living Room adds formality to the Living Room and creates a buffer in the open configuration of the floor plan. The most recent renovation project was a roof project completed in FY98.

This GOQ requires general repairs and mechanical, electrical, and architectural renovations.

ANALYSIS

A comprehensive survey, which includes a Condition Assessment Matrix, and the qualitative descriptions detailed below determined the condition of all the building components of this GOQ outlined in this Individual Facility Profile (IFP).

- A qualitative description of “excellent” indicates the condition exceeds Air Force GOQ Standards.
- “Good” indicates a fully serviceable condition, which meets GOQ Standards.
- “Fair” indicates a below-standard condition requiring minor maintenance and repair.
- “Poor” indicates a condition requiring moderate maintenance and repair.
- “Deteriorated” indicates a condition requiring major maintenance and repair.

Roof

- The roof structure consists of plywood decking on 2x wood rafters at 24” o.c. It is structurally sound and in good condition.
- The roof insulation does not meet the R-30 requirement.
- The asphalt shingle roof covering over the hip roof is in good condition. The sunroom has a flat built-up roof in poor condition.
- The roof slope is 3 in 12.
- The aluminum clad wood fascia is in good condition. The perforated aluminum soffits are in good condition.
- The aluminum flashing is in good condition.
- The aluminum gutters and downspouts are in good condition. The gutters are damaged at the patio roof.
- The brick chimney is in good condition. It serves a gas fireplace.

Structural Foundation/Exterior Walls

- The wood framed walls are in good condition.
- The brick veneer is in good condition.
- The concrete slab-on-grade is in good condition.



Front Entry



Rear



Side



Side



Sunroom



Foyer

- The insulated bronze anodized aluminum, double-glazed windows are in good condition.
- The vinyl window screens are in good condition.
- The wood entry door and side lights are in poor condition.
- The French doors between the family room and sunroom are in good condition.
- The aluminum storm doors are in fair condition.
- The door hardware is in good condition.

Structural Other Building Elements

- The attached, two-car garage is in good condition.
- The two, fiberglass garage doors are in good condition.
- The front porch with a terrazzo tile surface is inset into the floor plan to provide a covered entry. The front porch is in good condition.
- The covered concrete patio is in fair condition and has minor cracks. One area of the patio drains toward the storage room. A corrugated fiberglass roof covers the patio.
- There are two large storage rooms in good condition. These two storage rooms, combined with available cabinet space in the garage, provide ample storage for the GOQ.
- There is no trash enclosure for this GOQ.
- The PVC privacy fencing is in good condition.
- The landscaping is in good condition. The majority of the landscaping is traditional landscaping consisting of grass and trees. Xeriscaping, consisting of rock, cactus, and other indigenous desert plants, is at the front of the GOQ.

Mechanical

- Gas service enters the garage through an exposed plastic pipe lateral run along the back patio wall. The lateral runs underground from the main but surfaces outside the GOQ. This was done to avoid penetrations in the asbestos-containing drywall compound. The gas system to this GOQ has been privatized and is the property of the utility company.

The gas line also services gas logs in the fireplace. The piping system is adequately sized and is in good condition.

- Water service enters the GOQ at the wall behind Bathroom 1 through an underground lateral constructed of PVC pipe. Two water softeners and a reverse-osmosis water treatment unit condition the water. Hose bibs are located at the front and back of the GOQ. There is also a lawn water sprinkling system installed at this unit. The piping system is adequately sized and is in good condition.
- Sewer service exits the basement through an underground lateral constructed of PVC pipe. The piping system is adequately sized and is in good condition.
- A Reliance 50-gallon, gas-fired, water heater and a Rheem 30-gallon, gas-fired water heater provide domestic hot water. The 50-gallon unit serves the Kitchen, Laundry room, and Bathrooms 2 and 3. A re-circulation pump is utilized to service Bathroom 2. The 30-gallon unit serves Bathroom 1 only. Both water heaters and the pump are in good condition.
- Two gas-fired furnaces provide heating. One furnace has a condensate pump, is located in the hallway closet, and serves the bedroom areas. The other furnace is located in the mechanical room and serves the living areas. Heating is supplemented by a through-the-wall air-conditioner. This unit serves the storage rooms behind the garage. The heating system is in good condition.
- Duct-mounted, direct expansion coils located in the supply duct of each furnace provide central cooling. Cooling is supplemented by a through-the-wall air-conditioner. This unit serves the storage rooms behind the garage. The cooling system is in fair condition.
- The two outside condensers serving the furnaces are direct expansion, air cooled units with disconnects and are in fair condition.
- The ductwork is constructed of galvanized sheet metal and is in fair condition. The supply ductwork is located beneath the floor. Under-floor ductwork for cooling systems is not adequate because the supply air relative humidity cannot be maintained below 80%. Return ductwork is located above the



Living Room



Living Room



Family Room

*Dining Room**Kitchen**Kitchen*

dropped ceiling in the bedroom hallway and in a raceway that crosses the foyer.

- The supply registers on the floor are stamped steel. These registers are undersized, but only the Dining Room lacks adequate cooling. The high sidewall return grilles are adequately sized. Return grilles are located in each of the bedrooms and in the common area. Registers and grilles are in good condition.
- Life safety codes do not require a fire suppression system for this GOQ. None is installed.
- There are two manually controlled thermostats. The thermostats are in fair condition.

Electrical

- Electrical power is distributed by a 120/208V/3 phase/60Hz, 4W, 225A panel and a 120/240V/1 phase/60Hz, 3W, 100A panel. The 225A panel has a main disconnect breaker and is located in the Laundry room, adequately sized, and neatly installed. The 100A panel has a main disconnect breaker and is located in the garage, adequately sized, and neatly installed. The incoming overhead electrical secondary serves both panels at separate service entrances. The panels are in fair condition.
- The 3-prong, grounding-type, interior receptacles are in good condition. Receptacle placement meets GOQ Standards.
- GFCI receptacles are installed in the bathrooms. GFCI receptacles are not installed in the Laundry room or Kitchen.
- The exterior receptacles on the front and rear of the GOQ are not GFCI protected. The receptacles in the garage are not GFCI protected.
- The wiring in this GOQ is Romex 3 wire in fair condition. The storage room, sunroom, and exterior of the building all have exposed conduit. The exposed conduit was installed to avoid penetrations in the asbestos-containing drywall compound.
- The interior lighting consists of fluorescent and incandescent fixtures in good condition.

- There are hard-wired smoke detectors present in three of the bedrooms. Smoke detectors are considered to be in poor condition due to an insufficient quantity.
- There are no carbon monoxide detectors. Carbon monoxide detectors are considered to be in poor condition due to an insufficient quantity.
- The phone jacks are recessed, insufficient in number, and are in poor condition. Phone jacks installed in the sunroom are surface-mounted.
- Cable hookup is provided by coaxial cable routed on the exterior of the GOQ. The cable hookups are in poor condition and are provided to the bedrooms, family, and living rooms.
- There is no main service disconnect switch.
- Equipment service disconnect switches are located at the equipment locations. The service disconnects are in fair condition.
- The standard device light switches are in good condition.
- The lighting supporting the flagpole is inadequate and is considered to be in fair condition.

Interiors General

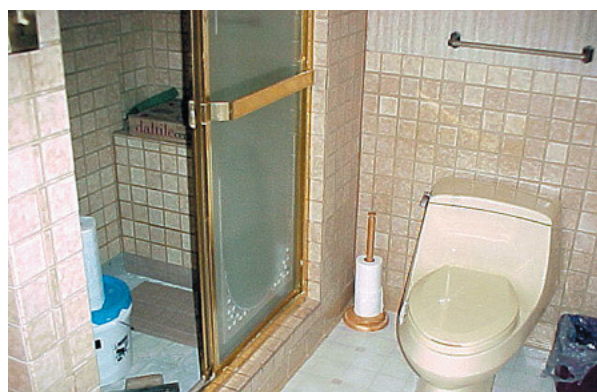
- The carpeting in the public areas and bedrooms is in good condition.
- The ceramic tile flooring in the sunroom is in good condition. The terrazzo flooring in the foyer is in good condition.
- The painted gypsum board walls are in good condition.
- The painted gypsum board ceilings are in good condition.
- The wood base and trim molding is in good condition, but some sections show wear.
- The flush, hollow core, wood interior doors are in fair condition. New double café-type swinging doors were installed between the Kitchen and family room after the site visit was completed.
- The louvered wood, bi-fold closet doors are in fair condition.
- The window coverings are in good condition.
- The wood closet shelving is in fair condition.
- The interior hardware is in fair condition.



Kitchen



Bathroom 1



Bathroom 1



Bathroom 2



Bathroom 2



Bathroom 2

Kitchen

- The Kitchen is arranged in a U-shaped configuration with a breakfast area that is too small to be functional. The Kitchen is not adequate for the entertainment functions of a general officer.
- The wood cabinets are in fair condition.
- The post-formed, plastic-laminate counter tops are in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The stainless steel, two-compartment sink is in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The sink fixtures are in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The refrigerator is in good condition.
- The cook-top range and double wall oven are in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- There is no government provided microwave oven.
- The vent hood is in good condition and vents to the exterior.
- The built-in dishwasher is in good condition.
- The 1/2-hp garbage disposal is in good condition.
- There is no freestanding or under-counter icemaker.
- There is no freestanding or under-counter trash compactor.
- The ceramic tile flooring is in good condition.
- The painted gypsum board walls are in good condition.
- The painted gypsum board ceiling is in good condition.
- The interior hardware is in fair condition.

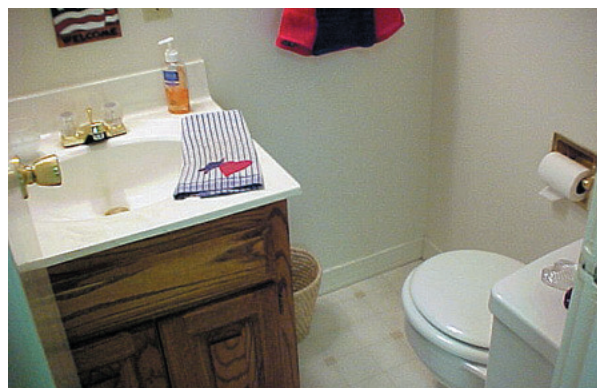
Bathroom 1

- Bathroom 1 serves Bedroom 1.
- The oak cabinets are in fair condition.
- The plastic-laminate counter is in fair condition. A solid counter top with integral sinks was installed by the Base after the site visit was completed, and the condition is now good.

- The enameled cast-iron, drop-in sinks are in fair condition. A solid counter top with integral sinks was installed by the Base after the site visit was completed, and the condition is now good.
- The fixture hardware is in poor condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The one-piece toilet is in good condition.
- The shower was being repaired at the time of the survey. The shower is in fair condition. The sliding acrylic shower doors are in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The ceramic tile flooring is in good condition.
- The gypsum board walls with a wallpaper finish above a ceramic tile wainscot are in fair condition. The gypsum board walls at the shower are in fair condition. This work was accomplished by the Base after the site visit was completed, and the condition is now good.
- The painted gypsum board ceiling is in good condition.
- Ventilation is through an operable window and a ceiling-mounted exhaust fan in good condition. Ventilation is adequate.
- The interior hardware is in good condition.

Bathroom 2

- Bathroom 2 serves Bedrooms 2, 3, and 4. It is separated into two areas by a swing door.
- The oak cabinet is in fair condition. An additional cabinet, mounted on the counter, is in fair condition.
- The plastic-laminate counter is in good condition.
- The enameled cast-iron, drop-in sink is in fair condition.
- The fixture hardware is in fair condition.
- The tank-type toilet is in good condition.
- The enameled cast-iron bathtub is in fair condition. The sliding acrylic shower doors are in fair condition. The ceramic tile shower surround is in good condition.
- The sheet vinyl flooring is in good condition.



Bathroom 3



Laundry

- The painted gypsum board walls and ceramic tile wainscoting are in good condition.
- The painted gypsum board ceiling is in good condition.
- Ventilation is through an operable window and a ceiling-mounted exhaust fan in good condition. Ventilation is adequate.
- The interior hardware is in fair condition.

Bathroom 3

- Bathroom 3 is the powder room adjacent to the Laundry room. This bathroom is awkwardly configured.
- The oak cabinet is in fair condition.
- The cultured marble counter top with integral sink is in fair condition.
- The fixture hardware is in fair condition.
- The tank-type toilet is in fair condition.
- The ceramic tile flooring is in good condition.
- The painted gypsum board walls are in good condition.
- The painted gypsum board ceiling is in good condition.
- Ventilation is through a ceiling-mounted exhaust fan in good condition. Ventilation is adequate.
- The interior hardware is in good condition.

Laundry Room

- The Laundry room is located between the Kitchen and the garage. Location is suitable.
- The ceramic tile flooring is in good condition.
- The painted gypsum board walls are in good condition.
- The painted gypsum board ceiling is in good condition.
- The plumbing hookup is a standard hot and cold connection, and is in good condition.
- The dryer vent hookup is a standard through-the-wall connection, and is in good condition.
- The oak wall cabinets are in good condition.
- The interior hardware is in fair condition.

Special Assessments

- Lead in domestic water piping was not assessed during this survey.
- Lead-based paint was not assessed during this survey.
- Asbestos-containing materials were not assessed during this survey. Base records identify asbestos containing materials are present in this GOQ. These records should be verified.
- Radon gas was not assessed during this survey. This region has an EPA designated radon risk.
- No sign of structurally damaging insect infestation was identified during survey.

House Sitework

- The concrete driveway is in good condition, but has minor cracks. The driveway is circular and allows drop off directly at the front door.
- The uncovered parking pad at the side of the driveway and street parking satisfies requirement for visitors.
- The electrical service is an overhead line fed from pole-mounted transformers. There are two electrical service entrances to the GOQ. It has exceeded its life expectancy and is in fair condition.
- The water service lateral from the main is underground and could not be surveyed. The water service is constructed of PVC pipe, is less than 20 years old, and is in good condition.
- The sewer service lateral to the GOQ is underground and could not be surveyed. The water service is constructed of PVC pipe, is less than 20 years old, and is in good condition.
- The gas service line is underground and could not be surveyed. The gas service is privately owned. It has not exceeded its life expectancy and is in good condition.
- The grading and drainage for this GOQ is sloped away from perimeter walls and is in good condition.
- The concrete sidewalks/walkways are in good condition, but have minor cracks.

House Plan Suitability

- The bedrooms are adequately sized and sufficient in number.
- The bathrooms are adequately sized and sufficient in number. Bathroom 3 has an inefficient configuration.
- The family room is adjacent to the Kitchen and meets entertaining requirements.
- The sunroom provides additional entertaining space to the GOQ, but the mechanical room on the side should be more concealed.
- The Living Room and Dining Room are not formally separated but meet adequate entertaining requirements.
- This is a rambler-style GOQ.
- The fourth bedroom does not satisfy code requirements for emergency egress.

RECOMMENDATIONS

This GOQ requires general repairs and mechanical, electrical, and architectural renovations.

Immediate maintenance projects that should be implemented include the following:

- Replace the existing receptacles in the Laundry room and Kitchen with GFCI receptacles.
- Replace the existing receptacles in the garage and on the front and rear of the GOQ with weatherproof GFCI receptacles.
- Install battery-operated smoke detectors per current GOQ Standards.
- Install plug-in carbon monoxide detectors per current GOQ Standards.
- This GOQ was constructed prior to 1998 and should be tested for lead in domestic water piping.
- This GOQ was constructed prior to 1975 and should be tested for lead-based paint.
- Survey and abate asbestos containing materials. This GOQ was constructed prior to 1981 and should be tested for asbestos containing materials.

- This GOQ is located in a region with an EPA designated radon risk and should be tested for radon gas.

Improvements to the GOQ to bring the GOQ up to current Air Force GOQ Standards during a whole house renovation project include the following:

Roof

- Install additional insulation that meets the R-30 requirement.
- Repair the flat built-up roof of the Sunroom.
- Repair the damaged gutter at the patio roof.

Structural Foundation/Exterior Walls

- Replace the front entry door and sidelights. See House Plan Suitability.
- Replace the aluminum storm doors.

Structural Other Building Elements

- Replace the patio slab and provide adequate drainage.
- Construct a new trash enclosure as shown on the proposed plan.

Mechanical

- Remove the existing gas-fired furnaces, distribution pumps, hot water piping system, radiators, convectors, cooling coils, condensing units, refrigerant piping, ductwork, registers, diffusers, thermostat, and all associated controls. Install two gas-fired furnaces each with a direct-expansion cooling coil and condensing unit, concrete pads, ductwork, refrigerant piping, insulation, condensation piping, registers, diffusers, digital programmable thermostats, and all associated controls to meet GOQ Standards. One furnace should serve the half of the public spaces including the sunroom, while the other furnace should serve the remaining public spaces

and bedrooms. Though the gas-fired furnaces are in good condition, the other system components are in fair condition. Therefore, it is more cost effective to replace the entire system.

Electrical

- Remove the existing panels and consolidate the electrical service into a 200A main panel.
- Replace the existing receptacles in the Laundry room and Kitchen with GFCI receptacles.
- Replace the existing receptacles in the garage and on the front and rear of the GOQ with weatherproof GFCI receptacles.
- Remove all exposed conduit and install concealed wiring after asbestos containing material abatement.
- Install additional hard-wired smoke detectors per current GOQ Standards.
- Install new hard-wired carbon monoxide detectors per current GOQ Standards. Analyze the use of dual hard-wired smoke/carbon monoxide detectors for cost efficiency.
- Replace all existing phone jacks and associated wiring. Install recessed phone jacks to meet GOQ Standards.
- Remove all exposed cable from the exterior of the GOQ and install concealed coaxial cable with one point of entry; install cable outlets in each bedroom, the Living Room, the family room, the breakfast area, and the Kitchen. Remove all interior coaxial cable and install coaxial cable concealed in the walls.
- Main service disconnect switch is to be installed with the 200A main panel.
- Replace all equipment service disconnect switches.
- Replace the flagpole lighting.

Interiors General

- Replace the wood base and trim molding in high traffic areas.
- Replace the interior doors.
- Replace the closet doors.
- Remove the closet shelving and install vinyl-coated wire shelving.

- Replace the interior hardware.

Kitchen

- Reconfigure the Kitchen as shown on the proposed plan to provide a larger, more open configuration. Install new wood cabinets, solid surface counter tops, two-compartment sink, sink fixtures with lifetime finish, cooktop with double-wall oven, microwave, free-standing icemaker (Furnishings), under-counter trash compactor, ceramic tile flooring, gypsum board walls and ceilings with painted finishes, and interior hardware.

Bathroom 1

- Replace the wood cabinets.

Bathroom 2

- Relocate Bathroom 2 as shown on the proposed plan to accommodate the foyer expansion. Construct new walls. Install a new cabinet, a cultured marble counter with two integral sinks, an enameled cast-iron bathtub with sliding glass doors and ceramic tile shower surround, and fixture hardware that has a lifetime finish. Reuse the existing toilet. Install ceramic tile flooring, painted gypsum board walls and ceiling, exhaust fan, and interior hardware.

Bathroom 3

- Reconfigure Bathroom 3 as shown on the proposed plan. Install a new cabinet, cultured marble counter with integral sink, fixture hardware that has a lifetime finish, toilet, ceramic tile flooring, painted gypsum board walls and ceiling, exhaust fan, and interior hardware.

Laundry Room

- Reconfigure the Laundry room as shown on the proposed plan to accommodate displaced mechanical space due to the relocated Bedroom 4. Construct new walls and install new doors for the Laundry

room and mechanical closet. Install new ceramic tile flooring. Install new painted gypsum board walls and ceilings. Relocate plumbing connections. Install new shelves and interior hardware.

Special Assessments

- This GOQ was constructed prior to 1998 and should be tested for lead in domestic water.
- This GOQ was constructed prior to 1975 and should be tested for lead-base paint.
- Survey and abate asbestos containing materials. This GOQ was constructed prior to 1981 and should be tested for asbestos containing materials.
- This GOQ is located in a region with an EPA designated radon risk and should be tested for radon gas.

House Sitework

- Seal cracks in the driveway to prevent further damage.
- Replace the electrical service and pole-mounted transformers with underground electrical service and pad-mounted transformer. Transition primary cable to overhead at the closest utility pole. Coordinate work with future electrical distribution projects.
- Seal cracks in the sidewalks/walkways.

House Plan Suitability

- Expand the Foyer as shown on the proposed plan to provide a more formal entry. Demolish Bathroom 2, closets, and mechanical closet. Recess exterior wall and install exterior wall with new entry double-door with sidelights. Install new terrazzo flooring and painted gypsum board walls and ceiling. Install two wood columns. This recommendation was added to comply with Base standards.
- Relocate Bedroom 4 as shown on the proposed plan to sunroom. Remove the sunroom floor slab and construct new concrete floor slab level with the existing GOQ floor slab. Construct new exterior walls with windows. Install new roof support. Install new carpet flooring and painted gypsum board walls and

ceiling. Relocate the mechanical room equipment. Relocation is required to address emergency egress and other functional area relocations. This recommendation was added to comply with Base standards.

Basis for Cost Estimate

The survey team developed two cost estimates for their recommended improvements to each GOQ. The first cost estimate, the Incremental Cost Estimate (Operations and Maintenance (O&M) and Remaining Investments Cost Estimate), identifies work that can be completed incrementally over a five-year period using housing O&M funds. The estimate also captures work that is required but cannot be funded with O&M funds under the subheading “Investment.” The second cost estimate, the Whole House Cost Estimate, contains the same work requirements as the first but uses a comprehensive, one-time, project approach funded by MILCON funds. The Air Force prefers this whole house approach as the most economical means of bringing the GOQs up to standards.

The team developed all cost estimates based on first quarter 2000 costs. Therefore, the costs must be escalated, as required, when programming or executing any GOQ project. Both the O&M and Whole House Cost Estimates represent the same work requirements and are not additive. Costs for both O&M and whole house improvements are based on the survey’s condition assessment, analysis, and recommendations and reflect the survey team’s professional opinion. The categories in the cost estimate correspond to those used in the survey analysis and recommendations.

O&M Cost Estimate (Incremental Cost Estimate)

The O&M cost estimate categorizes all required Maintenance and Repair (M&R) work in the GOQ fundable through O&M funds. The cost estimate provides a guide for prioritizing projects to be included in the GOQ O&M

Five-Year Long Range Plan and Annual Plan. These two plans will together serve as an interim plan until a Congressionally-approved Whole House Project is programmed.

The O&M cost estimate categorizes each work item, based on M&R codes, indicating the relative urgency of repair. These codes prioritize work items by distinguishing between repairs immediately required to address life-safety issues and those for other recommended maintenance and repair projects.

Code 1 – Immediate repair work addressing certain Life Safety Code violations and threats or structural defects causing building components to fail. This work occurs before a major renovation project is implemented. The permanent solution typically would be accomplished later as a whole house renovation project.

Code 2 – Projects that are generally small and do not place an undue burden on the resident. These projects should not require extensive demolition and repair or displacement of the residents. They usually rehabilitate building components suspected, based on their actual condition and/or life expectancy, to fail within five years of these assessments.

Code 3 – Large-scale projects that typically cannot be accomplished while the GOQ is occupied. Typical projects include large-scale mechanical/electrical system repairs and Kitchen and bathroom replacement. Although Code 3 projects are needed, their implementation can wait until a more cost-effective whole house project is programmed. Any Code 3 work that must be completed prior to the whole house project must follow the approved plan for the GOQ and should be deleted from the Whole House scope. Programmers must adjust the scope and cost for the whole house project accordingly during programming.

The O&M estimate identifies remaining work not covered by O&M funding, but nevertheless requiring completion. This type of work, called Investment work, is defined below:

Investment –Housing improvements required to bring the GOQ up to current Air Force standards that, because of the nature of the work, cannot be accomplished with O&M funds, unless they are small in scope and can be accomplished within the Minor Alteration Authority.

Together, the Code 1, 2, and 3 M&R work items and the remaining Investment items equate to the “scope” items in the Whole House Cost Estimate. The cost to bring the GOQ up to current Air Force standards will be higher than whole house if the required work is accomplished incrementally.

When directed by MAJCOM, a percentage of the Whole House Subtotal was added to the Investment Cost Estimate to accommodate improvements related to Force Protection issues. Programmers must adjust the scope and cost for the Investment Project accordingly during programming.

Whole House Cost Estimate

The Whole House Cost Estimate combines all required maintenance/repairs/investments into one project that completely revitalizes a GOQ to last another 25 years. Taking advantage of economies of scale, whole house projects represent the most cost-effective housing revitalization approach for the Air Force to use to meet current standards. These projects are typically approved by Congress through normal budget cycles and are accomplished using MILCON construction funds. The Air Force Family Housing Master Plan will identify allocations for these whole house projects.

When directed by MAJCOM a percentage of the Whole House Subtotal was added to accommodate improvements related to Force Protection issues. The percentage is a budget number that will vary when final evaluation by the base security force is made for force protection. Programmers must adjust the scope and cost for the whole house project according during programming for additional Force Protection issues.

Incremental Cost Estimate**Operations and Maintenance (O&M)**

2710 San Juan Loop

Holloman AFB

M&R Category Code	Work Item	Total
	Roof	
2	Install Additional Insulation	\$ 3,457
2	Repair Flat Built-Up Roof of Sunroom	\$ 1,276
2	Repair Damaged Gutter at Patio Roof	\$ 419
	Structural Foundation/Exterior Walls	
2	Replace Aluminum Storm Doors	\$ 446
	Structural Other Building Elements	
2	Replace Patio Slab and Provide Adequate Drainage	\$ 1,874
	Interior Mechanical	
3	Remove Existing Furnaces and Equipment, Install 2 New Furnaces, Equipment	\$ 41,022
	Interior Electrical	
3	Remove Existing Panels & Consolidate into 200A Panel	\$ 3,168
1	Replace Existing Receptacles in Laundry Room and Kitchen w/ GFCI	\$ 178
1	Replace Existing Receptacles in Garage and Front/Rear w/ Weatherproof GFCI	\$ 178
2	Remove All Exposed Conduit and Install Concealed Wiring	\$ 8,026
1	Install Battery-Operated Smoke Detectors	\$ 344
3	Install Hard-Wired Smoke Detectors	\$ 1,519
1	Install Plug-In Carbon Monoxide Detectors	\$ 344
3	Install New Hard-Wired Carbon Monoxide Detectors	\$ 1,148
2	Replace Existing Phone Jacks, Wiring; Install Recessed Jacks	\$ 2,037
3	Remove All Exposed Cable, Install Concealed Coax and Cable Outlets	\$ 1,971
2	Main Service Disconnect Switch to be Installed with Panel	\$ 662
2	Replace Equipment Service Disconnects	\$ 1,620
2	Replace Exterior Flagpole Lighting	\$ 910
	Interiors General	
3	Replace Wood Base and Trim Molding in High Traffic Areas	\$ 5,700
2	Replace Interior Doors	\$ 4,896
2	Replace Closet Doors	\$ 5,202
2	Remove Closet Shelving and Install Vinyl-Coated Wire Shelving	\$ 1,499
2	Replace Interior Hardware	\$ 2,789
	Interiors Kitchen	
	Interiors Bathroom 1	
2	Replace Wood Cabinets	\$ 2,169
	Interiors Bathroom 2	
	Interiors Bathroom 3	
3	Reconfigure Bathroom 3	\$ 3,856

Incremental Cost Estimate**Operations and Maintenance (O&M) Continued**

M&R Category Code	Work Item	Total
	Interiors Laundry Room	
	Special Assessments	
1	Test for Lead in Domestic Water	\$ 918
1	Test for Lead-Based Paint	\$ 918
1	Survey and Abate Asbestos Containing Materials	\$ 31,632
1	Test for Radon	\$ 608
	House Sitework	
2	Seal Cracks in Driveway	\$ 810
2	Replace Electrical Service, Transformers with Underground	\$ 3,786
2	Seal Cracks in Sidewalk/Walkway	\$ 122
	House Plan Suitability	
	Operations and Maintenance Subtotal	\$ 135,504
	Sub Total to ACF of: (included in line items)	
	Contingency (included in line items)	
	SIOH (included in line items)	
	Operations and Maintenance Total	\$ 135,504

Incremental Cost Estimate

Remaining Investments

2710 San Juan Loop

Holloman AFB

Work Item	Total
Roof	
Structural Foundation/Exterior Walls	
Structural Other Building Elements	
Construct New Trash Enclosure as Shown	\$ 731
Interior Mechanical	
Interior Electrical	
Interiors General	
Interiors Kitchen	
Reconfigure Kitchen	\$ 35,140
Interiors Bathroom 1	
Interiors Bathroom 2	
Relocate Bathroom 2	\$ 13,082
Interiors Bathroom 3	
Interiors Laundry Room	
Reconfigure Laundry Room, Relocate Mechanical Room	\$ 4,031
Special Assessments	
House Sitework	
House Plan Suitability	
Expand Foyer, Demo Bathroom 2	\$ 11,714
Relocate Bedroom 4 to Sunroom, Remove Mech Room	\$ 19,719
Remaining Investment Subtotal	\$ 84,417
Sub Total to ACF of: .98	\$ 82,729
Contingency 5%	\$ 86,865
SIOH 5.7%	\$ 91,816
Remaining Investments Total	\$ 91,816

Whole House Cost Estimate

2710 San Juan Loop

Holloman AFB

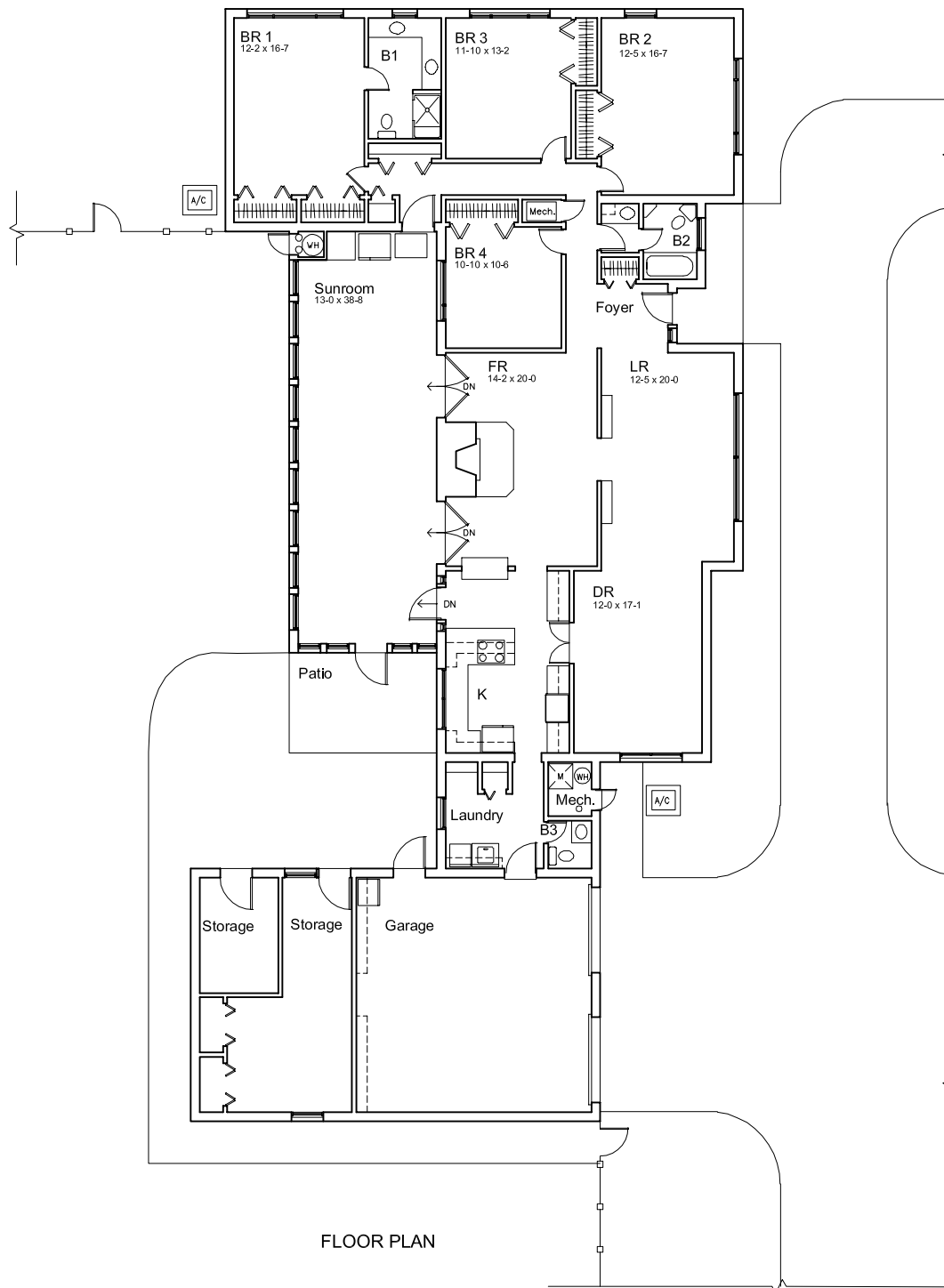
Work Item	Total
Roof	\$ 4,136
Structural Foundation/Exterior Walls	\$ 330
Structural Other Building Elements	\$ 2,119
Interior Mechanical	\$ 28,166
Interior Electrical	\$ 14,935
Interiors General	\$ 21,594
Interiors Kitchen	\$ 33,520
Interiors Bathroom 1	\$ 1,607
Interiors Bathroom 2	\$ 12,222
Interiors Bathroom 3	\$ 3,213
Interiors Laundry Room	\$ 3,911
Special Assessments	\$ 28,170
House Sitework	\$ 3,845
House Plan Suitability	\$ 30,383
Whole House Subtotal	\$ 188,151
Sub Total to ACF of: .98	\$ 184,388
Contingency 5%	\$ 193,607
SIOH 5.7%	\$ 204,643
Whole House Total	\$ 204,643

Improvements/Replacement Analysis Recommendations

Whole House Cost for this GOQ	\$ 204,643
Replacement Cost for this GOQ	\$ 334,180
Whole House to Replacement Cost Ratio for this GOQ	61%

Because the Whole House to Replacement Cost Ratio is less than 70%, improvement of the GOQ is recommended.

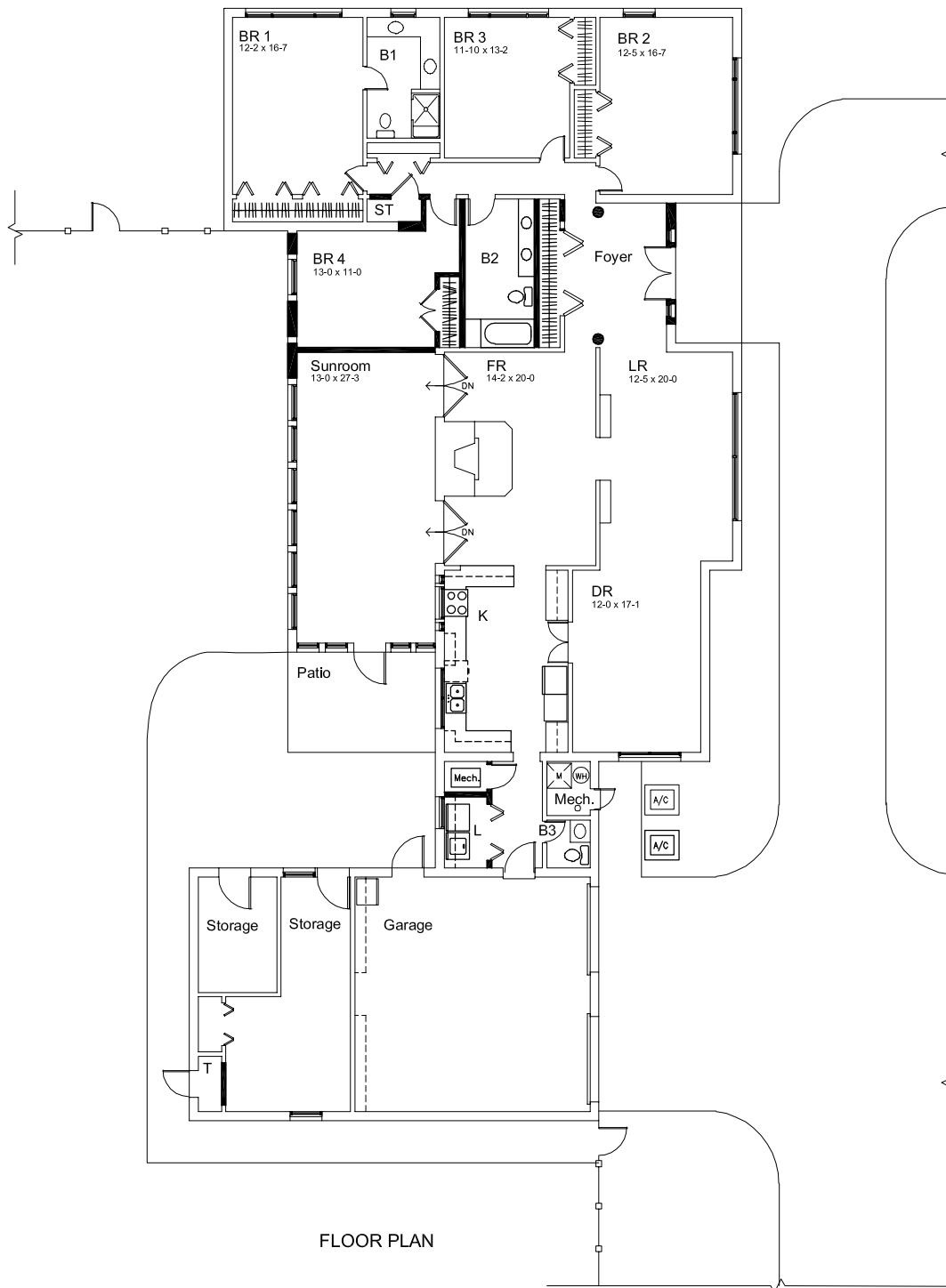
This replacement cost is based on FY00, using the Tri-Service cost model for 2310 NSF(SCP) at ACC Bases.



2710 SAN JUAN LOOP
4 Bedroom/ GOQ
GROSS SF: 3033
NET SF: 2675

EXISTING





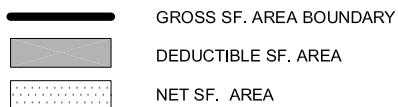
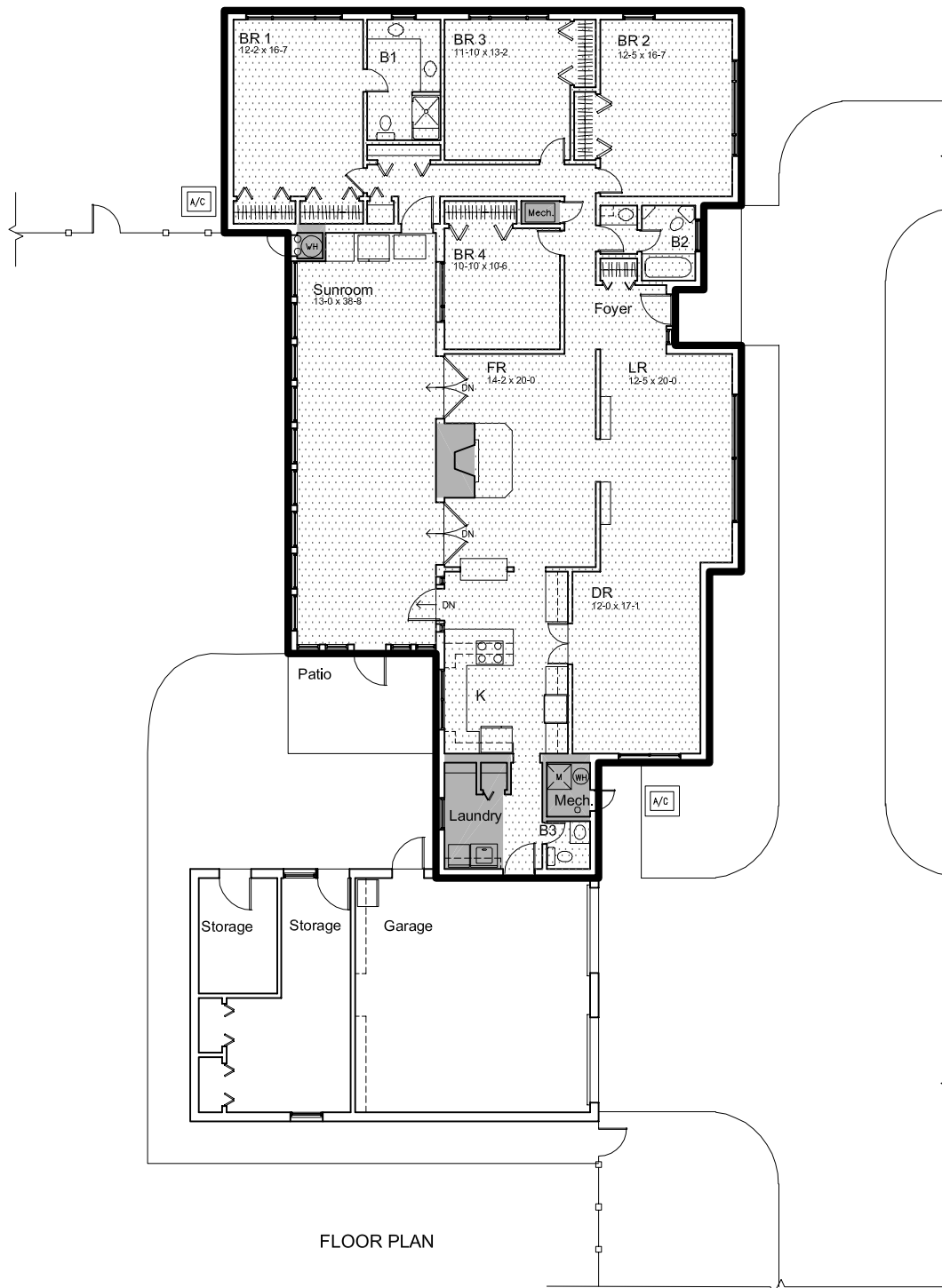
2710 SAN JUAN LOOP

4 Bedroom/ GOQ

GROSS SF: 3012

NET SF: 2675

PROPOSED



2710 SAN JUAN LOOP
 4 Bedroom/ GOQ
 GROSS SF: 3033
 NET SF: 2675

EXISTING



4.4.2.1.1 Unit Type CP.4.G

Improvement Cost Summary

Base Name: Holloman Air Force Base

System/Subsystem	Unit Cost
Whole House/All Systems	\$0
Roof	\$4,210
Structural/Foundation/Exterior Walls	\$336
Structural/Other Building Elements	\$2,157
Mechanical	\$28,673
Electrical	\$15,204
General/All but Kitchen, Baths, Laundry	\$21,983
Kitchen	\$34,123
Bathroom #1	\$1,636
Bathroom #2	\$12,442
Bathroom #3	\$3,271
Laundry Room	\$3,981
Special Assessments	\$28,677
House Sitework	\$3,914
House Plan Suitability	\$30,930
PACAF/Stairwell/Basement Ratings	\$0
USAFE/Stairwell/Basement Ratings	\$0
Subtotal	\$191,538
ACF (0.98) Adjusted Subtotal	\$187,707
SIOH @3.00%	\$5,631
Contingency @5.00%	\$9,667
Adjusted Subtotal (FY2001\$)	\$203,005
Escalation @3.33%	\$6,760
Total Unit Improvement Cost (FY2003\$)	\$209,765

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4.5 Existing/Proposed Inventory/CAM Database Reports

4.5.1 Introduction

The following report, “4.5.2 Existing & Proposed Unit Grade Mix,” charts all units by Neighborhood and Unit Type. The size in gross and net square feet is provided and also the CAM score for both units and neighborhoods. Recommended use of each unit type is provided based on the Housing Requirements of Chapter 2. Unit Grade Mix distribution is illustrated in Section 4.2.

Housing requirement charts showing redistribution of existing assets with resulting deficit or surplus by grade and bedroom are included in the Section 4.5.3.

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4.5.2 Existing and Proposed Unit Grade Mix																				
Base:		Holloman AFB, New Mexico					FY:		2003											
FY2003 Existing Inventory Unit Grade Mix								Proposed Inventory Unit Grade Mix Analysis						Proposed Inventory Summary						
								Core Requirements Analysis		Customer Demand Analysis					Summary					
								Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Surplus Qty	Prop. Grade/ BR	Con- version?	Prop. Hsg. Units Qty	Prop. Surplus Qty	Total	
Unit Type	Grade/ BR	BA	Gr. SF	Net SF	Qty	Total	CAM Score	Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Surplus Qty	Prop. Grade/ BR	Con- version?	Prop. Hsg. Units Qty	Prop. Surplus Qty	Total	
<u>2700-2800 Area</u>																				
CP.3.S	FGO 3BR	2	1681	1476	31		3.60	FGO 3BR	13	FGO 3BR	18	FGO 3BR	18		FGO 3BR	No	31	0		
CP.3.T	CGO 3BR	2	1554	1248	42		3.69	CGO 3BR	21	CGO 3BR	21	CGO 3BR	21		CGO 3BR	No	42	0		
CP.3.U	FGO 3BR	2	1713	1456	9		3.66			FGO 3BR	9	FGO 3BR	9		FGO 3BR	No	9	0		
CP.3.V	CGO 3BR	2	1551	1326	38		3.61	CGO 3BR	38						CGO 3BR	No	38	0		
CP.3.W	FGO 3BR	2	1671	1400	2		3.70			FGO 3BR	2	FGO 3BR	2		FGO 3BR	No	2	0		
CP.3.W	CGO 3BR	2	1671	1400	4		3.70	CGO 3BR	3	CGO 3BR	1	CGO 3BR	1		CGO 3BR	No	4	0		
CP.3.X	CGO 3BR	2	1673	1400	6		3.68			CGO 3BR	6	CGO 3BR	6		CGO 3BR	No	6	0		
CP.3.Z	FGO 3BR	2	1669	1477	1		3.49			FGO 3BR	1	FGO 3BR	1		FGO 3BR	No	1	0		
CP.4.G	GOQ 4BR	2	3302	2128	1		3.68	GOQ 4BR	1						GOQ 4BR	No	1	0		
CP.4.S	SOQ 4BR	2.5	2396	2125	1		3.80			SOQ 4BR	1	SOQ 4BR	1		SOQ 4BR	No	1	0		
CP.4.T	SOQ 4BR	2	2011	1772	11		3.83	SOQ 4BR	6						SOQ 4BR	No	6	0		
										SOQ 4BR	5	FGO 4BR	5		FGO 4BR	Yes	5	0		
CP.4.U	SOQ 4BR	2	2067	1864	1		3.70	SOQ 4BR	1						SOQ 4BR	No	1	0		
CP.4.V	FGO 4BR	2	1935	1587	5		3.63	FGO 4BR	5						FGO 4BR	No	5	0		
CP.4.V	CGO 4BR	2	1935	1587	20		3.63	CGO 4BR	11						CGO 4BR	No	11	0		
										CGO 4BR	9	FGO 4BR	9		FGO 4BR	Yes	9	0		
CP.4.X	CGO 4BR	2	1733	1460	16		3.66	CGO 4BR	10						CGO 4BR	No	10	0		
										E-9 3BR	3				E-9 3BR	Yes	3	0		
										E-9 4BR	1	CGO 4BR	2		E-9 4BR	Yes	3	0		
CP.4.Y	FGO 4BR	2	1733	1460	2		3.67	FGO 4BR	2						FGO 4BR	No	2	0		
Subtotal of units							190												190	
Infrastructure CAM:							2.92													
Community CAM:							2.57													
<u>APPR 50-69 2100 Area</u>																				
FY03.3	JNCO 3BR	2	1630	1310	51		5.00	JNCO 3BR	51						JNCO 3BR	No	51	0		
FY03.4	JNCO 4BR	3	1950	1570	50		5.00	JNCO 4BR	50						JNCO 4BR	No	50	0		
Subtotal of units							101												101	
Infrastructure CAM:							3.01													
Community CAM:							2.76													

FY2003 Existing Inventory Unit Grade Mix								Proposed Inventory Unit Grade Mix Analysis					Proposed Inventory Summary							
								Core Requirements Analysis		Customer Demand Analysis					Summary					
								Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Surplus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Surplus Qty	Total	
Unit Type	Grade/ BR	BA	Gr. SF	Net SF	Qty	Total	CAM Score	Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Surplus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Surplus Qty	Total	
<u>APPR 50-69 Renovated</u>																				
AP50-69.2.W	JNCO 2BR	1.5	1270	988	18		3.69	JNCO 2BR	18						JNCO 2BR	No	18	0		
AP50-69.3.W	JNCO 3BR	2.5	1520	1231	40		3.68	SNCO 3BR	40						SNCO 3BR	Yes	40	0		
AP50-69.3.X	JNCO 3BR	2.5	1371	1080	64		3.70	JNCO 3BR	34	JNCO 3BR	30	JNCO 3BR	30		JNCO 3BR	No	64	0		
Subtotal of units						122													122	
Infrastructure CAM:						3.55														
Community CAM:						2.34														
<u>APPR 50-69 Unrenovated</u>																				
AP50-69.2.X	JNCO 2BR	1.5	1247	945	4		2.88	JNCO 2BR	4						JNCO 2BR	No	4	0		
AP50-69.3.Y	JNCO 3BR	2.5	1533	1234	20		2.96	SNCO 3BR	20						SNCO 3BR	Yes	20	0		
AP50-69.4.X	JNCO 4BR	2.5	1536	1248	8		2.92	SNCO 3BR	8						SNCO 3BR	Yes	8	0		
Subtotal of units						32													32	
Infrastructure CAM:						3.39														
Community CAM:						2.30														
<u>Capehart 2500-2600 Area</u>																				
CP.2	JNCO 2BR	1	1148	999	26		3.62	JNCO 2BR	26						JNCO 2BR	No	26	0		
CP.3.Q	SNCO 3BR	2	1384	1217	72		3.53	JNCO 3BR	37						JNCO 3BR	Yes	37	0		
								JNCO 4BR	35						JNCO 4BR	Yes	35	0		
CP.3.Q	JNCO 3BR	2	1384	1217	46		3.53	JNCO 3BR	46						JNCO 3BR	No	46	0		
CP.3.R	SNCO 3BR	2	1345	1172	36		3.53	JNCO 2BR	36						JNCO 2BR	Yes	36	0		
CP.3.R	JNCO 3BR	2	1345	1172	26		3.53	JNCO 2BR	26						JNCO 2BR	Yes	26	0		
CP.4.Q	SNCO 4BR	2	1628	1338	22		3.63	SNCO 4BR	8	SNCO 4BR 2		SNCO 4BR (Surplus-Demo)	0		SNCO 4BR (Surplus-Demo)	No	8	0		
								SNCO 3BR	12					2	SNCO 3BR	Yes	0	2		
															SNCO 3BR	Yes	12	0		
CP.4.R	SNCO 4BR	2	1343	1105	12		3.39			SNCO 3BR 12		JNCO 3BR	12		JNCO 3BR	Yes	12	0		
Subtotal of units						240													240	
Infrastructure CAM:						3.09														
Community CAM:						2.29														

FY2003 Existing Inventory Unit Grade Mix								Proposed Inventory Unit Grade Mix Analysis					Proposed Inventory Summary						
								Core Requirements Analysis		Customer Demand Analysis				Summary					
								Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Sur-plus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Sur-plus Qty	Total
Unit Type	Grade/ BR	BA	Gr. SF	Net SF	Qty	Total	CAM Score	Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Sur-plus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Sur-plus Qty	Total
FY96-02 Replacement																			
FY02.3.W	JNCO 3BR	2	1388	1228	36		5.00	JNCO 3BR	36						JNCO 3BR	No	36	0	
FY02.3X	JNCO 3BR	2	1401	1206	36		5.00	JNCO 3BR	36						JNCO 3BR	No	36	0	
FY02.3Y	JNCO 3BR	2	1458	1283	4		5.00	JNCO 3BR	4						JNCO 3BR	No	4	0	
FY96-02.2	JNCO 2BR	1	1139	922	4		3.86	JNCO 2BR	4						JNCO 2BR	No	4	0	
FY96-02.3W	JNCO 3BR	2	1383	1197	36		3.88	JNCO 3BR	36						JNCO 3BR	No	36	0	
FY96-02.3X	JNCO 3BR	2	1341	1123	32		3.85	JNCO 3BR	6	JNCO 3BR	26	JNCO 3BR	26		JNCO 3BR	No	32	0	
FY96-02.3Y	JNCO 3BR	2	1388	1205	4		3.90	JNCO 3BR SNCO 3BR	3 1						JNCO 3BR SNCO 3BR	No Yes	3 1	0 0	
Subtotal of units							152												152
Infrastructure CAM:							3.76												
Community CAM:							3.48												
Wherry 2200-2300 Area																			
WH.2.V	JNCO 2BR	1	963	776	12		3.07	JNCO 2BR	12						JNCO 2BR	No	12	0	
WH.2.X	JNCO 2BR	1	1138	898	74		2.95	JNCO 2BR	74						JNCO 2BR	No	74	0	
WH.2.Y	JNCO 2BR	2	1305	1068	130		3.18	JNCO 2BR	130						JNCO 2BR	No	130	0	
WH.2.Z	JNCO 2BR	2	1373	1080	68		3.11	JNCO 2BR	68						JNCO 2BR	No	68	0	
WH.3.W	SNCO 3BR	1	1106	955	6		2.97	JNCO 2BR	6						JNCO 2BR	Yes	6	0	
WH.3.W	JNCO 3BR	1	1106	955	26		2.97	JNCO 2BR	26						JNCO 2BR	Yes	26	0	
WH.3.X	JNCO 3BR	1	1426	1240	10		3.05	JNCO 2BR	10						JNCO 2BR	Yes	10	0	
WH.4.W	SNCO 4BR	2	1531	1294	6		2.96	SNCO 4BR	6						SNCO 4BR	No	6	0	
WH.4.W	JNCO 4BR	2	1531	1294	31		2.96	JNCO 4BR SNCO 4BR	25 6						JNCO 4BR SNCO 4BR	No Yes	25 6	0 0	
WH.4.Y	SNCO 4BR	2	1655	1450	8		2.96	SNCO 4BR	8						SNCO 4BR	No	8	0	
WH.4.Y	JNCO 4BR	2	1655	1450	4		2.96	SNCO 4BR	4						SNCO 4BR	Yes	4	0	
WH.5	E-9 5+BR	3	1909	1614	1		3.66	E-9 5+BR	1						E-9 5+BR	No	1	0	
Subtotal of units							376												376
Infrastructure CAM:							2.84												
Community CAM:							2.68												

FY2003 Existing Inventory Unit Grade Mix								Proposed Inventory Unit Grade Mix Analysis						Proposed Inventory Summary						
								Core Requirements Analysis		Customer Demand Analysis					Summary					
								Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Sur-plus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Sur-plus Qty	Total	
Unit Type	Grade/ BR	BA	Gr. SF	Net SF	Qty	Total	CAM Score	Prop. Core Grade/ BR	Core Qty	Avail. Cust. Demand Grade/ BR	Avail. Cust. Dem. Qty	Prop. Cust. Demand Grade/ BR	Prop. Cust. Dem. Qty	Prop. Sur-plus Qty	Prop. Grade/ BR	Con-ver-sion?	Prop. Hsg. Units Qty	Prop. Sur-plus Qty	Total	
<u>Wherry 2400 Area</u>																				
WH.2.W	JNCO 2BR	1	1041	872	12		3.11	JNCO 2BR	12						JNCO 2BR	No	12	0		
WH.2.X	JNCO 2BR	1	1138	898	84		2.95	JNCO 2BR	80	JNCO 2BR 4		JNCO 2BR (Surplus-Demo)	0	4	JNCO 2BR (Surplus-Demo)	No	80	0		
																No	0	4		
WH.2.Y	JNCO 2BR	2	1305	1068	32		3.18	JNCO 2BR	32						JNCO 2BR	No	32	0		
WH.2.Z	JNCO 2BR	2	1373	1080	16		3.11	JNCO 2BR	16						JNCO 2BR	No	16	0		
WH.3.W	JNCO 3BR	1	1106	955	32		2.97	JNCO 2BR	32						JNCO 2BR	Yes	32	0		
WH.3.X	JNCO 3BR	2	1426	1240	3		3.05	JNCO 2BR	3						JNCO 2BR	Yes	3	0		
WH.4.W	SNCO 4BR	2	1531	1294	8		2.96	JNCO 4BR	8						JNCO 4BR	Yes	8	0		
WH.4.W	JNCO 4BR	2	1531	1294	4		2.96	JNCO 4BR	4						JNCO 4BR	No	4	0		
WH.4.X	SNCO 4BR	2	1710	1461	1		2.99	SNCO 4BR	1						SNCO 4BR	No	1	0		
WH.4.Y	SNCO 4BR	2	1655	1450	6		2.96	JNCO 4BR	6						JNCO 4BR	Yes	6	0		
WH.4.Y	JNCO 4BR	2	1655	1450	2		2.96	JNCO 4BR	2						JNCO 4BR	No	2	0		
Subtotal of units						200													200	
Infrastructure CAM:							2.88													
Community CAM:							2.61													
TOTAL						1413			1264		149		143	6			1407	6	1413	

4.5.3 Inventory/Requirements Comparison

Base: Holloman AFB, New Mexico

1. MFH Assets - Existing Inventory - FY03					
(Sum of Existing Inventory Unit Grade Mix on Chart 4.5.2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	1	0	1
SOQ	0	0	13	0	13
FGO	0	43	7	0	50
CGO	0	90	36	0	126
Subtotal	0	133	57	0	190
E-9	0	0	0	1	1
SNCO	0	114	63	0	177
JNCO	480	466	99	0	1045
Subtotal	480	580	162	1	1223
TOTAL	480	713	219	1	1413

2. Core MFH Requirements, FY 2006					
(Sum of MFH Core Requirements - Chapter 2.2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	1	0	1
SOQ	0	0	7	0	7
FGO	0	13	7	0	20
CGO	52	10	21	0	83
Subtotal	52	23	36	0	111
E-9	0	3	2	0	5
SNCO	0	81	33	0	114
JNCO	719	185	130	0	1034
Subtotal	719	269	165	0	1153
TOTAL	771	292	201	0	1264

3. Proposed Units to Satisfy Core Requirements					
(Sum of Proposed Core Grade/BR, Chart 4.5.2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	1	0	1
SOQ	0	0	7	0	7
FGO	0	13	7	0	20
CGO	0	62	21	0	83
Subtotal	0	75	36	0	111
E-9	0	3	1	1	5
SNCO	0	81	33	0	114
JNCO	615	289	130	0	1034
Subtotal	615	373	164	1	1153
TOTAL	615	448	200	1	1264

3A. Surplus (Deficit) Units Proposed to Satisfy Core Requirements					
(Chart 3 minus Chart 2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	0	0	0
FGO	0	0	0	0	0
CGO	(52)	52	0	0	0
Subtotal	(52)	52	0	0	0
E-9	0	0	(1)	1	0
SNCO	0	0	0	0	0
JNCO	(104)	104	0	0	0
Subtotal	(104)	104	(1)	1	0
TOTAL	(156)	156	(1)	1	0

Notes: Table 3A.

- A. The surplus of 52 3BR CGO units results from the inventory of existing and new units. These units shall be used to satisfy the shortfall of 52 2 BR CGO units.
- B. The existing E-9 5BR will be retained and used to satisfy 1 E-9 4BR core requirements.
- C. The surplus of 104 3BR JNCO units results from the inventory of existing and new units. These units shall be used to satisfy the shortfall of 104 2 BR JNCO units.

4. Existing Units Available to Satisfy Customer Demand or Surpluses after Core Requirements are met					
(Sum of Available Customer Demand Grade/BR, Chart 4.5.2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	6	0	6
FGO	0	30	0	0	30
CGO	0	28	11	0	39
Subtotal	0	58	17	0	75
E-9	0	0	0	0	0
SNCO	0	12	2	0	14
JNCO	4	56	0	0	60
Subtotal	4	68	2	0	74
TOTAL	4	126	19	0	149

4A. Effective Military Family Rental Requirements, 2006					
(From HMA Table 4-21)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	1	0	1
SOQ	0	0	8	0	8
FGO	0	43	21	0	64
CGO	99	23	23	0	145
Subtotal	99	66	53	0	218
E-9	0	18	3	0	21
SNCO	0	146	36	0	182
JNCO	1076	250	134	0	1460
Subtotal	1076	414	173	0	1663
TOTAL	1175	480	226	0	1881

5. Proposed Units Available to Supply Customer Demand after Core Requirements are met					
(Sum of Proposed Customer Demand Grade/BR, Chart 4.5.2)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	1	0	1
FGO	0	30	14	0	44
CGO	0	28	0	0	28
Subtotal	0	58	15	0	73
E-9	0	0	2	0	2
SNCO	0	0	0	0	0
JNCO	0	68	0	0	68
Subtotal	0	68	2	0	70
TOTAL	0	126	17	0	143

5A. Proposed Surplus (deficit) Units to Supply MF Rental Requirements					
(Chart 7 minus Chart 4A)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	0	0	0
FGO	0	0	0	0	0
CGO	(99)	67	(2)	0	(34)
Subtotal	(99)	67	(2)	0	(34)
E-9	0	(15)	0	1	(14)
SNCO	0	(65)	(3)	0	(68)
JNCO	(461)	107	(4)	0	(358)
Subtotal	(461)	27	(7)	1	(440)
TOTAL	(560)	94	(9)	1	(474)

6. Gains (Losses) for Units Available to Supply Customer Demand					
(Chart 5 minus Chart 4)					
	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	(5)	0	(5)
FGO	0	0	14	0	14
CGO	0	0	(11)	0	(11)
Subtotal	0	0	(2)	0	(2)
E-9	0	0	2	0	2
SNCO	0	(12)	(2)	0	(14)
JNCO	(4)	12	0	0	8
Subtotal	(4)	0	0	0	(4)
TOTAL	(4)	0	(2)	0	(6)

Notes: Table 5A.

- A. The Surplus Rental Requirement of 67 CGO 3BR units shall be retained and improved as CGO 3BR units and re-assigned to satisfy some of the CGO 2BR Rental Requirement shortfall of 99 units.
- B. The Surplus Rental Requirement of 107 JNCO 3BR units shall be retained and improved as JNCO 3BR units and used to satisfy some of the JNCO 2BR Rental Requirement shortfall of 461 units.

7. Proposed Unit Grade Mix Summary

(Chart 3 plus Chart 5)

	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	1	0	1
SOQ	0	0	8	0	8
FGO	0	43	21	0	64
CGO	0	90	21	0	111
Subtotal	0	133	51	0	184
E-9	0	3	3	1	7
SNCO	0	81	33	0	114
JNCO	615	357	130	0	1102
Subtotal	615	441	166	1	1223
TOTAL	615	574	217	1	1407
Total Units Recommended for Demolition					6
Total Units Recommended for Surplus					0

8. Total number of units converted

(Chart 7 minus Chart 1)

	2BR	3BR	4BR	5+BR	TOTAL
GOQ	0	0	0	0	0
SOQ	0	0	(5)	0	(5)
FGO	0	0	14	0	14
CGO	0	0	(15)	0	(15)
Subtotal	0	0	(6)	0	(6)
E-9	0	3	3	0	6
SNCO	0	(33)	(30)	0	(63)
JNCO	135	(109)	31	0	57
Subtotal	135	(139)	4	0	0
TOTAL	135	(139)	(2)	0	(6)

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4.6 Unit Cost Estimate Database Reports

4.6.1 Introduction

The data in the following Unit Improvement Cost Summary Report summarizes all unit improvement estimates from Section 4.3.

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4.6.2 Unit Improvement Cost Summary

Base Name: Holloman Air Force Base

Neighborhood/Area	Existing Unit Type	Existing Grade/BR		Proposed Unit Type	Proposed Grade/BR		No. Units	Improvement(All) Unit Cost FY2003\$	Total Cost FY2003\$
2100 Area	FY03.3	JNCO	3	FY03.3	JNCO	3	51	\$0	\$0
	FY03.4	JNCO	4	FY03.4	JNCO	4	50	\$0	\$0
Subtotal							101		\$0
2700-2800 Area	CP.3.S	FGO	3	CP.3.S	FGO	3	31	\$103,976	\$3,223,262
	CP.3.T	CGO	3	CP.3.T	CGO	3	42	\$101,204	\$4,250,588
	CP.3.U	FGO	3	CP.3.U	FGO	3	9	\$79,930	\$719,370
	CP.3.V	CGO	3	CP.3.V	CGO	3	38	\$83,795	\$3,184,226
	CP.3.W	CGO	3	CP.3.W	CGO	3	4	\$67,082	\$268,328
	CP.3.W	FGO	3	CP.3.W	FGO	3	2	\$67,082	\$134,164
	CP.3.X	CGO	3	CP.3.X	CGO	3	6	\$92,299	\$553,797
	CP.3.Z	FGO	3	CP.3.Z	FGO	3	1	\$119,188	\$119,188
	CP.4.G	GOQ	4	CP.4.G	GOQ	4	1	\$209,765	\$209,765
	CP.4.S	SOQ	4	CP.4.S	SOQ	4	1	\$43,604	\$43,604
	CP.4.T	SOQ	4	CP.4.T	FGO	4	5	\$86,963	\$434,813
	CP.4.T	SOQ	4	CP.4.T	SOQ	4	6	\$86,963	\$521,775
	CP.4.U	SOQ	4	CP.4.U	SOQ	4	1	\$82,587	\$82,587
	CP.4.V	CGO	4	CP.4.V	CGO	4	11	\$90,804	\$998,844
	CP.4.V	CGO	4	CP.4.V	FGO	4	9	\$90,804	\$817,236
	CP.4.V	FGO	4	CP.4.V	FGO	4	5	\$90,804	\$454,020
	CP.4.X	CGO	4	CP.4.X	CGO	4	9	\$115,751	\$1,041,761
	CP.4.X	CGO	4	CP.4.X	E9	4	4	\$115,751	\$463,005
	CP.4.X	CGO	4	CP.4.X.3	E9	3	3	\$116,723	\$350,170
	CP.4.Y	FGO	4	CP.4.Y	FGO	4	2	\$85,093	\$170,185
Subtotal							190		\$18,040,689
APPR 50-69 Renovated	AP50-69.2.W	JNCO	2	AP50-69.2.W	JNCO	2	18	\$52,696	\$948,521
	AP50-69.3.W	JNCO	3	AP50-69.3.W	SNCO	3	40	\$81,590	\$3,263,618
	AP50-69.3.X	JNCO	3	AP50-69.3.X	JNCO	3	64	\$74,870	\$4,791,685
Subtotal							122		\$9,003,824
APPR 50-69 Unrenovated	AP50-69.2.X	JNCO	2	AP50-69.2.X	JNCO	2	4	\$112,197	\$448,790

Neighborhood/Area	Existing Unit Type	Existing Grade/BR		Proposed Unit Type	Proposed Grade/BR		No. Units	Improvement(All) Unit Cost FY2003\$	Total Cost FY2003\$
APPR 50-69 Unrenovated	AP50-69.3.Y	JNCO	3	AP50-69.3.Y	SNCO	3	20	\$131,815	\$2,636,290
	AP50-69.4.X	JNCO	4	AP50-69.3.X.2	SNCO	3	8	\$134,009	\$1,072,075
Subtotal							32		\$4,157,155
Capehart 2500-2600 Area	CP.2	JNCO	2	CP.2	JNCO	2	26	\$63,636	\$1,654,536
	CP.3.Q	JNCO	3	CP.3.Q	JNCO	3	46	\$97,376	\$4,479,299
	CP.3.Q	SNCO	3	CP.3.Q	JNCO	3	37	\$97,376	\$3,602,914
	CP.3.Q	SNCO	3	CP.3.Q.4	JNCO	4	35	\$130,220	\$4,557,687
	CP.3.R	JNCO	3	CP.2.R.2	JNCO	2	26	\$76,287	\$1,983,465
	CP.3.R	SNCO	3	CP.2.R.2	JNCO	2	36	\$76,287	\$2,746,336
	CP.4.Q	SNCO	4	CP.3.Q.2	SNCO	3	12	\$72,886	\$874,636
	CP.4.Q	SNCO	4	CP.4.Q	SNCO	4	8	\$84,365	\$674,924
	CP.4.R	SNCO	4	CP.3.R.2	JNCO	3	12	\$97,892	\$1,174,699
Subtotal							238		\$21,748,497
FY96-02 Replacement	FY02.3.W	JNCO	3	FY02.3.W	JNCO	3	36	\$0	\$0
	FY02.3.X	JNCO	3	FY02.3.X	JNCO	3	36	\$0	\$0
	FY02.3.Y	JNCO	3	FY02.3.Y	JNCO	3	4	\$0	\$0
	FY96-02.2	JNCO	2	FY96-02.2	JNCO	2	4	\$8,789	\$35,154
	FY96-02.3.W	JNCO	3	FY96-02.3.W	JNCO	3	36	\$3,258	\$117,272
	FY96-02.3.X	JNCO	3	FY96-02.3.X	JNCO	3	31	\$5,134	\$159,149
	FY96-02.3.X	JNCO	3	FY96-02.3.X	SNCO	3	1	\$5,134	\$5,134
	FY96-02.3.Y	JNCO	3	FY96-02.3.Y	JNCO	3	4	\$15,502	\$62,009
Subtotal							152		\$378,718
Wherry 2200-2300 Area	WH.2.V	JNCO	2	WH.2.V	JNCO	2	12	\$127,727	\$1,532,721
	WH.2.X	JNCO	2	WH.2.X	JNCO	2	74	\$119,638	\$8,853,221
	WH.2.Y	JNCO	2	WH.2.Y	JNCO	2	130	\$120,850	\$15,710,436
	WH.2.Z	JNCO	2	WH.2.Z	JNCO	2	68	\$114,820	\$7,807,763
	WH.3.W	JNCO	3	WH.2.W.2	JNCO	2	26	\$103,346	\$2,687,009
	WH.3.W	SNCO	3	WH.2.W.2	SNCO	2	6	\$103,346	\$620,079
	WH.3.X	JNCO	3	WH.2.X.2	JNCO	2	10	\$112,099	\$1,120,986
	WH.4.W	JNCO	4	WH.4.W	JNCO	4	25	\$141,057	\$3,526,415
	WH.4.W	JNCO	4	WH.4.W	SNCO	4	6	\$141,057	\$846,340
	WH.4.W	SNCO	4	WH.4.W	SNCO	4	6	\$141,057	\$846,340

Neighborhood/Area	Existing Unit Type	Existing Grade/BR	Existing Units	Proposed Unit Type	Proposed Grade/BR	Proposed Units	No. Units	Improvement(All) Unit Cost FY2003\$	Total Cost FY2003\$
Wherry 2200-2300 Area	WH.4.Y	JNCO	4	WH.4.Y	SNCO	4	4	\$158,207	\$632,829
	WH.4.Y	SNCO	4	WH.4.Y	SNCO	4	8	\$158,207	\$1,265,657
	WH.5	E9	5	WH.4.Z		4	1	\$79,821	\$79,821
Subtotal							376		\$45,529,615
Wherry 2400 Area	WH.2.W	JNCO	2	WH.2.W	JNCO	2	12	\$116,106	\$1,393,277
	WH.2.X	JNCO	2	WH.2.X	JNCO	2	84	\$119,638	\$10,049,602
	WH.2.Y	JNCO	2	WH.2.Y	JNCO	2	32	\$120,850	\$3,867,184
	WH.2.Z	JNCO	2	WH.2.Z	JNCO	2	16	\$114,820	\$1,837,121
	WH.3.W	JNCO	3	WH.2.W.2	JNCO	2	32	\$103,346	\$3,307,087
	WH.3.X	JNCO	3	WH.2.X.2	JNCO	2	3	\$112,099	\$336,296
	WH.4.W	JNCO	4	WH.4.W	JNCO	4	4	\$141,057	\$564,226
	WH.4.W	SNCO	4	WH.4.W	JNCO	4	8	\$141,057	\$1,128,453
	WH.4.X	SNCO	4	WH.4.X	SNCO	4	1	\$150,048	\$150,048
	WH.4.Y	JNCO	4	WH.4.Y	JNCO	4	2	\$158,207	\$316,414
	WH.4.Y	SNCO	4	WH.4.Y	JNCO	4	6	\$158,207	\$949,243
Subtotal							200		\$23,898,952
Grand Total							1411		\$122,757,449

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